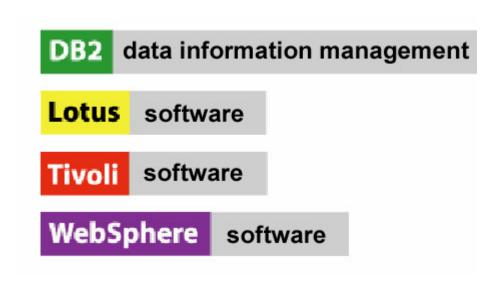
# PartnerWorld for Software Business Partner Certification & Training Guide



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Jim Kunzle, Jennifer Fenn

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## **Purpose**

The purpose of this document is to assist PartnerWorld for Software Business Partners in selecting the appropriate training to achieve their desired certification goals. This guide should be used as a reference only as training and certification programs are subject to updates.

It is recommended that the business partner reviews the <u>certification</u> role, <u>education</u>, <u>test objectives and assessment/sample exams</u> that are available to determine the skills required to prepare for the exam. Details can be obtained from the IBM, Tivoli, Informix and Lotus Certification Websites listed below under valuable references. This new version now has important product sales education and the associated roadmaps and tests.

## Contacts

Should you require assistance in planning training for yourself or your organization, contact your BPSM or the PartnerWorld Team for assistance. E-mail and telephone information is listed by geography and country.

U.S. and Canada pwswna@us.ibm.com

PartnerWorld Contact Services 1-800-426-9990 Option 3 SW

Europe, Middle East, Africa
PartnerWorld for Software Help
Emeapw@uk.ibm.com

Location	Telephone
Austria	(43)01-245925910
Belgium (English speaking)	(32)02 225 35 35
Belgium (French speaking)	(02) 210 98 05
Denmark (English speaking)	(45) 20 82 02
Finland (English speaking)	(358) 09 45 96 400
France	(33) 0 810 801 426
Germany	(49) 01803 246 256
Ireland	(353) 01 815 9597
Italy	(39) 02 7031 6105
Netherlands (English speaking)	(31) 020-513 5155
Norway (English speaking)	(47) 66 99 83 53
Portugal (English speaking)	(351) 800 880 336
Spain	(34) 901 200 700
Sweden (Swedish or English speaking)	(46) 08 793 5008
Switzerland (French, German & Italian speaking)	(41) 0 844 80 30 30
United Kingdom	(44) 01256 344 500
International (English language support for all countries not listed above)	(44) 1475 557060

**Local Enrollment Telephone Numbers/Enrollment Website** 

Country	Local Phone Number/BP Enroll Web Site
Australia	1800 801 088 www.ibm.com.au/educate
Austria	0800 20 84 20
Belgium	+32-2-655.52.88
Canada	1 800 IBM TEACh (426-8322)
China	+86-10-65391188 ext. 4981 Fax:
	+86-10-65391688
Croatia	+385 1 6308 194
Czech Republic	+420 2 7213 1210
Denmark	70 10 32 67
Egypt	+20 2 3492533 Mr. Hany Galal
Finland	010 808 487
France	0802 096 187
Germany	+49 (0)1805 42 60 18
Hong Kong	+852-28104576 ext. 6643 Fax: +852-28100210
Hungary	+36 1 382 5900
India	+91-80-5269299
Italy	800-017001
Korea	082 828 0713
Malaysia	603-7102314
Morocco	+21 2 2972797 Mr Aziz Cheddadi
Netherlands	020 513 3940
Norway	815 48 231
Philippines	632-8192363
Poland	+48(22) 8786807
Portugal	017916144
Romania	+40 1 224 1544
Russia	+7 - 095 - 940-20-00
Saudi Arabia	+966 1 4056910 Mr Marcel Raffoul
Singapore	65-3201688
Slovakia	+421-7-69257 285
Slovenia	+386 61 1796 635
South Africa	0800 112555
Spain	0901-100-400
Sweden	077 186 1037
South Africa	0800 112555
Switzerland	41-58 333 6969 Fax: 0800 80 7696
Taiwan	+886-27258888 ext. 3047 Fax: +886-27203510

Thailand	662-2734373
UK	0845 7581329 -
	http://www.ibm.com/services/learning/uk
UAE	+971 2 275165 Mr. Sumender Reddy
USA	1 800 IBM TEACh (426-8322)
	http://www.ibm.com/services/learning/us
For Latin America - General PartnerWorld for Software information and assistance in Latin America is available by contacting the LA Membership Centre Hotline. This can be done either by e-mail  (pwswmch@br.ibm.co m) or by calling the PartnerLine in your country. The PartnerLine will then transfer your call to the LA Membership Centre Hotline.	For Other Asia-Pacific - The local Business Partner contact should notify one of the following regional Learning Services (E&T) focal point:  A/NZ - Owen Kessell okessell@au.ibm.com ASEAN - educ@sg.ibm.com Greater China Group - Ping Qin qinping@cn.ibm.com Japan - Tsuneo Endoh etsuneo@jp.ibm.com Korea - Sehwan Myung shmyung@kr.ibm.com

Country	Partnerline Telephone Number
Argentina	0800-44-IBMPL (0800-44-42675)
Bolivia	0800-10-8008 extension 2382
Brazil	0800-78-7370
Chile	800-200-333 extension 2382
Colombia	9800-917-555 extension 2382
	Or Bogota 628-2828 extension 2382
Ecuador	02-565-090 extension 2382
Mexico	01-800-426-1000
	extension 5911 or Mexico City 5270-5911
Paraguay	595-21-206-708
	or Asuncion 206-708
Peru	0800-50001 extension 2382
Uruguay	000-405-4101
Venezuela	0800-100-5000 extension 2382

Country	Local Phone Number	BP Enroll Web Site
Australia	1800 801 088	http://www.ibm.com/training/au
China	010-65391188-3368 800-810-1818 ext.5168 Fax: 010-65391688	http://www.ibm.com/shop/cn/
Hong Kong	+852-28104576 ext.6643 Fax: +852-28100210	http://www.ibm.com/hk/services/learning/
India	+91-80-2063000/6787202	http://www.ibm.com/in/education/
Indonesia	62 21 5238725	
Japan	0120-105553	http://www.ibm.com/services/lear ning/jp/
Korea	02) 3781-5004/5	http://www.ibm.com/services/lear ning/kr/
Malaysia	603-7102314	http://www.ibm.com/services/lear ning/my/
New Zealand	0800 801 800	http://www.ibm.com/training/nz
Philippines	(63-2) 9952363, 9952214	http://www.ibm.com/services/lear ning/ph/
Singapore	(65) 6320-1688	http://www.ibm.com/services/lear ning/sg/
Taiwan	(02)2719-3299 ext.818 Fax: (02)2719-3266	http://www.ibm.com/tw/services/learning/
Thailand	(662) 273-4500 Fax: (65) 6221-2617	http://www.ibm.com/services/lear ning/th/

**For Other Asia-Pacific** - The local Business Partner contact should notify one of the following regional Learning Services (E&T) focal point:

ASEAN - educ@sg.ibm.com

## Valuable References

The following is a list of useful websites to assist you with developing your training and certification plans.

## **IBM PartnerWorld for Software**

http://www.ibm.com/partnerworld/software

## IBM Certification

http://www.ibm.com/certify

## **Lotus Certification**

http://www.lotus.com/certification

## **CertificationTest Information**

http://www-1.ibm.com/certify/partner/na/tests/info.shtml

## **Lotus Training**

http://www.lotus.com/education

## **Education Centers for IBM Software (ECIS)**

http://www.lotus.com/softwaretraining

## **IBM Training**

http://www.ibm.com/services/learning/

## **Informix Training**

Http://www.ibm.com/software/data/informix/education

## **Learning Services Global Training schedules**

http://www.ibm.com/partnerworld/pwhome.nsf/educert/pe\_ils\_emea\_ind ex.html

http://www-1.ibm.com/partnerworld/pwhome.nsf/weblook/tac\_ils\_ap\_sel ect.html

## **Latest Technical and Sales Accepted Certifications**

http://www-100.ibm.com/partnerworld/software/pwswzone.nsf/subcat?readform&cat=tc&subcat=acceptedcertifications

## **IBM Sales Training**

http://www-100.ibm.com/partnerworld/software/pwswzone.nsf/subcat?readform&cat=tc&subcat=salestraining

Disclaimer: All prospective candidates should refer to the certification website for the latest details.

This guide is a quick reference tool to illustrate what training offerings are available to assist the prospective certification candidates in reaching a particular certification role. The candidate must be aware that certification exams assume practical knowledge which is obtained by working with the product for a period of time. Business partners that have the necessary requisite skills may elect to sit the tests rather than attend the training. The candidate is encouraged to review the test objectives and sample exams that are available at the respective certification websites listed above before taking the certification exam.

## How to use this Guide

This guide is structured to link training offerings and certification levels together, to enable prospective certification candidates to plan their training to achieve a particular certification. The guide is best viewed using the acrobat bookmarks, which will allows you to navigate between the certification roadmap and the course descriptions. Click on the blue underlined links to launch your internet browser which will take you to a relevant websites for further reference information.

## Viewing Bookmarks:

• To view the bookmarks select *window* in the main menu and check the option *bookmarks* or you can hit the *F5* key.

## Printing this Document:

You can either print the entire document or you can tell acrobat to print specific pages within the document.

 To print a specific section of this document select *file* in the main menu, then select *print*. Inside the print range section of the options menu you will see three options. • Select the button next to "pages from (blank field) to (blank field)".

The certification paths (tables) in this guide will show:

- The certification roles available by Power Brand and product/specialty area
- The test/s required to reach that certification level
- The recommended training required.
- The training roadmap sequence (e.g 1,2,3... This is the recommended sequence of attendance, of course your current experience and skills are the key factors in selecting your training path.
- There are alternative training methods listed in RED that provide optional delivery methods to classroom training.
- Review <a href="http://www.ibm.com/certify">http://www.ibm.com/certify</a> for additional information, alternative training choices, links to training class information and schedules
- The Product, and Solution Oriented Sales Education that prepares students for the Sales Mastery tests that are used for PartnerWorld for Software Competency requirements.
- The Sales Mastery Tests for each Power Brand (check web site for up-to-date info)

http://www-100.ibm.com/partnerworld/software/pwswzone.nsf/subcat?readform&cat=tc&subcat=salestraining

There is also a course description area in this guide as well as a worksheet to assist in planning a candidate's training. Review the individual course information which contains overview, objectives, contents and prerequisites. Additional training information can be viewed at <a href="http://www.ibm.com/services/learning/index\_ns.html">http://www.ibm.com/services/learning/index\_ns.html</a> (select country). This site also provides training roadmaps with alternative delivery options i.e., CBTs, satellite, other e-learning courses and publications. For Lotus Domino training, candidates can find the nearest Lotus Authorized Education Center at <a href="http://www.lotus.com/education">http://www.lotus.com/education</a>.

The Education Center for IBM Software training (ECIS) offers the same Lotus courses and uses the same course codes. ECIS also offers many

Certification and Training Quick Reference Guide

of IBM's other training courses. Course codes will vary between ITES and ECIS training centers.

Information on ECIS training can be viewed at <a href="http://www.lotus.com/softwaretraining">http://www.lotus.com/softwaretraining</a>

**Note**: ITES course codes will differ from country to country. The worldwide or master course codes are listed in the following certification tables along with the US course code. Since we merged the Worldwide and North America catalogs, multiple course codes will be listed (i.e., WW WF311G, NA WF311).

# **Certification Processing**

When you take a test, your results are immediately calculated and you are given an Examination Score Report before you leave the testing room. With the exception of Note 1 below, your test results and demographic data are sent from the test delivery vendor (e.g. Prometric, Inc.) to IBM for processing. When you have taken all the tests required for a certification role, your Certification Welcome Package containing your certificate will be mailed to you. This package will also visibly contain the IBM Certification Agreement. Upon opening the package, it means you agree to comply with the Agreement.

http://www.ibm.com/certify/process/agreemnt.shtml

## Note: Non-IBM Certification Tests

Tests 310-025 and 310-035 are owned by Sun Microsystems. Test 1D0-438 (taken prior to October 3, 2001), 1D0-538 and 1D0-539 are owned by ProsoftTraining.com. For these tests, the test delivery vendor does not send your results to IBM. For IBM to give you credit for these tests, you need to fax your Examination Score Report to (512)838-7961 in the USA, or mail it to:

Professional Certification Program from IBM IBM Corporation 11400 Burnet Road, Mail Drop 3013 Austin, Texas 78758, USA <a href="http://www-1.ibm.com/certify/certs/ad-registration.shtml#processing">http://www-1.ibm.com/certify/certs/ad-registration.shtml#processing</a>

## Feedback

This guide was developed to assist PartnerWorld members in selecting the appropriate training to reach their certification levels. Anyone who wants to contribute to making this guide a more effective tool is encouraged to send their feedback to:jjkunzle@us.ibm.com

# **DB2 Information Management Certification**

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Database Associate - DB2 UDB Database V8.1 Family	700	DB2 UDB V8.1 Family Fundamentals +V8 Self Study table below	CT3A CT3B CF03 CF030 CT3A CF12 CF120	DB2 Family Fundamentals (SV31-8089 & SV31-8091) DB2 Family Fundamentals  DB2 SQL Workshop (SV31-8089-01) DB2 SQL Workshop	CBT 2 Days CBT 2 Days	1 1 2 2
IBM Certified Database Administrator - DB2 UDB V8.1 for UNIX/Windows	700	DB2 UDB V8.1 Family Fundamentals  +Self Study table below  DB2 UDB V8.1 Database Administration  +V8 Self Study table below	CT3B CF03 CF030 CT3A CF12 CF120 CF20 CF201 CF211 CF211 CF23 CF231	DB2 Family Fundamentals DB2 Family Fundamentals or FN625  DB2 SQL Workshop DB2 SQL Workshop or FN625 (ECIS)  DB2 UDB Administration Workshop for Linux or DB2 UDB Administration Workshop for UNIX/AIX or DB2 UDB Administration Workshop for NT	CBT 2 Days CBT 2 Days 4 Days 4 Days 4 Days	1 1 2 2 3 3 3
IBM Certified Database Administrator - DB2 UDB V7 for OS/390	(Prereq 512/700 514	DB2 UDB Family Fundamentals  DB2 UDB V7.1 OS/390  Database Administration +Self Study Alternative Below	CF83 CF830 CF84 CF840	Prereq Training (classroom or CBT (CT3A & CT3B) DB2 for OS/390 Database Administration Workshop and DB2 for OS/390 Database for Experienced DBAs	4.5 Days 4 Days	1& 2 1& 2 3
IBM Certified Application Developer - DB2 UDB V8 Family	Prereq 512 /700 703	DB2 UDB Family Fundamentals DB2 UDB V8.1 Family Application Development +V8 Self Study table below	CF10 CF103 And CF13 CF113	Prereq Training (classroom or CBT (CT3A & CT3B) DB2 UDB Programming Fundamentals DB2 UDB Advanced Programming	2 Days 3 Days US 2 Days	1 & 2 1 & 2 3
IBM Certified Database Administrator - DB2 UDB V7 to V8.1 for Linux, UNIX, Windows	706	DB2 UDB V8.1 Database Administration	CG08 CG082	Prereq: Already V7 Certified DB2 UDB V8 Administration Workshop for Linux, UNIX & Windows (TRANSITION COURSE V7 to V8)	2 Days	1 2

**DB2 Information Management (Certification Self Study Guides)** 

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
DB2 UDB V8 Database Administrator for UNIX/Windows	700 701 or 516	+ DB2 UDB V8.1 Family Fundamentals + DB2 UDB V8.1 UNIX/Windows Database Administration + DB2 UDB V7.1 OS/390 Database Administration	Self-Study	DB2 Universal Database V8.1 Certification Guides Publication Order Number Prentice Hall: ISBN: 0-13-046361-2, (test 700 & 701) ISBN: 0-13-065076-5, IBM Order Number: SC09-4928 (test 516)		
IBM Certified Application Developer - DB2 UDB V8.1 Family	703	+ DB2 UDB Application Development	Self-Study	DB2 Universal Database V8.1 Certification Guide Prentice Hall ISBN: 0-13-046391-4 (test 703)		

**DB2 Information Management Certification** 

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Solution Designer - Business Intelligence V8.1	705	Prerequisite Test 700 DB2 Family Business Intelligence Solutions V8.1	DW11 DW110 DW60 DW600	Prereq: DB2 Family Fundamentals Building the Data Warehouse DB2 OLAP Server	4.5 Days 4 Days	3
IBM Certified Solutions Expert  – IBM Content Manager –  OnDemand Multiplatform	440	IBM Content Manager - OnDemand Multiplatform	OD1001 OD1002 OD1003	A Guide for the OnDemand Administrator OD101, OD104, OD105 (ECIS) Content Manager OnDemand Applications Workshop Content Manager OnDemand	5 Days 2.5 Days 2 Days	1 2
IBM Certified Solutions Expert  – IBM Content Manager –  OnDemand iSeries	441	IBM Content Manager - OnDemand iSeries	ODCS1	Systems Workshop Implementing OnDemand for iSeries Server	4.5 Days	1
			N1918	Implementing OnDemand for AS/400	3.5 Days	2
			A1919	OnDemand for AS/400 Advanced Topics	4.5 Days	3

IBM Certified Solution	442	IBM Content Manager V8	IM400	IBM Content Manager Multiplatforms	4.5 Days	1	
Designer- DB2 Content				V8. Implementation & Administration or			
Manager – V8				IM401 (ECIS)			

# DB2 Information Management Sales Mastery Test (visit sales web site for latest information, link in table below)

Sales Skill Area	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
Data Management Solution Sales Professional	M111	Data Information Management Sales Mastery Test	Web Lecture	Data Information Management Sales 101 (PartnerWorld University)	5 Hours	1
			DB2 IM 201	Data Information Management Sales 201	1 Day	2

# **Informix Certification**

Certification Level	Test#	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Solutions Expert - Red Brick	660-511	System Administration for Informix	L1786	Informix Red Brick Decision Server Business Queries	2 Days	1
Warehouse V6 System Administrator		Red Brick Decision Server V6 Exam	L1920	IBM Red Brick Decision Server Administration	4 Days	2
			L2791	IBM Red Brick Decision Server Performance and Tuning	3 Days	3
IBM Certified Solutions Expert - Informix Dynamic	660-112	Managing and Optimizing Informix Dynamic Server Databases Exam	FN848	Managing and Optimizing Informix Dynamic Server Databases	4 Days	1
Server V9 System  Administrator		- <b>,</b>	FN910	IBM Informix Data Migration and Reorganization	2 Days	2
Transition from certified V7	660-612	System Administration for IBM	L1846	IBM Informix Dynamic Server	4 Days	3
Administrator to V9 System Administrator is achieved by		Informix Dynamic Server V9 Exam	L2403	Administration IBM Informix Dynamic Server	4 Days	4
passing test 612			L2748	Performance Tuning	3 Days	5
Course L2403 should have been part of V7 training				IBM Informix Dynamic Server Backup and Restore		
IBM Certified Solutions Expert - Informix 4GL	660-301	Informix 4GL Development Exam	L1007 L2224	Developing Applications Using Informix 4GL	4 Days 3 Days	1
Developer			L2224	Advanced IBM Informix 4GL	3 Days	2

				Development		
IBM Certified Solutions Expert - Informix Dynamic	660-112	Managing and Optimizing Informix Dynamic Server Databases Exam	FN848	Managing and Optimizing Informix Dynamic Server Databases	4 Days	1
Server V7 System		,	FN910	IBM Informix Data Migration and	2 Days	2
<u>Administrator</u>				Reorganization		
	660-211	System Administration for Informix	L1BSA	System Administration for Informix	CBT	2
	000-211	Dynamic Server V7	LIBOA	Dynamic Server Courseware Bundle	СВТ	3
	660-212	Performance Tuning: Informix	L2403	IBM Informix Dynamic Server	4 Days	4
		Dynamic Server		Performance Tuning		

# **Lotus Notes and Domino R5 to R6 Certification**

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified System Administrator - Lotus Notes and Domino 6	602	Notes Domino 6 System Administration Update	ND720 or Self Study	Exploring the new features of IBM Domino Administration CBT61: Lotus Domino 6 for R5 Administrators: Part 1 Preparing CBT62: Lotus Domino 6 for R5	2 Days 7-8 Hrs.	1 1 2
IBM Certified Application  Developer - Lotus Notes and Domino 6	601	Notes Domino 6 Application Development Update	ND420 or Self Study	Administrators: Part 2 Features  Exploring the new features of IBM Domino Designer 6 CBT63: Lotus Domino 6 for R5 Developers: Part 1 Features	7-8 Hrs. 3 Days 7-8 Hrs.	1
			Study	CBT64: Lotus Domino 6 for R5 Developers: Part 2 Enhancements CBT65: Lotus Domino 6 for R5 Developers: Part 3 Tools	6-8 Hrs. 7-8 Hrs.	3

Lotus Sales Mastery Test (visit sales web site for latest information, link is in table below)

Sales Skill Area	Test#	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
Lotus Solution Sales Professional	M115	Lotus Sales Mastery Test	Web Lecture	Lotus Sales 101 (PartnerWorld University)	2.5 Hrs.	1
			Lotus Sales 201	Lotus Sales 201	1 Day	2

# **Lotus Collaborative Solutions Certification**

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Associate System Administrator - Lotus Sametime 3.0	542	Administering Sametime 3.0	ST730	Administering a Sametime 3.0 Infrastructure	2 Days	1
IBM Certified Associate System Administrator - Lotus Domino.Doc 3.0	533	Domino.Doc System Administration 3.0	DD710	Domino.Doc 3.0 System Administration	2 Days	1
IBM Certified Associate System Administrator - Lotus QuickPlace 3.0	531	Administerting Lotus QuickPlace 3.0	QP700	Administering Lotus QuickPlace 3.0	2 Days	1
IBM Certified Associate System Administrator - Lotus Discovery Server 1.0	534	Implementing Lotus Discovery Server 1.0	KS300	Implementing Lotus Discovery Server	2 Days	1
IBM Certified System Administrator - Lotus Collaborative Solutions	542, 533 531, 534	Certification requires passing 3 tests of your choice		See training above		You can choose sequence
IBM Certified Advanced System Administrator - Lotus Collaborative Solutions	542, 533 531, 534	Certification requires passing 4 of 4 tests		See training above		You can choose sequence
IBM Certified Associate  Developer - Lotus Workflow 3	565	Developing Applications Using Lotus Workflow 3	LW400	Developing Applications Using Lotus Workflow 3	2 Days	1
IBM Certified Associate Developer - Lotus QuickPlace 3	561	Developing Instant Collaborative Applications with Lotus QuickPlace 3.0	QP400	Building Instant Collaborative Applications with Lotus QuickPlace 3.0	2 Days	1
IBM Certified Associate  Developer - Lotus Sametime 3.0	572	Developing Web Applications in Sametime 3.0	ST550	Developing Web Applications for Lotus Sametime 3	2 Days	1
IBM Certified Associate  Developer - Lotus  Domino.Doc 3.0	563	Domino.Doc 3.0 Customization	DD420	Domino.Doc 3.0 Customization and the API	3 Days	1
IBM Certified Application Developer - Lotus Collaborative Solutions	565, 572 561, 563	Certification requires passing 3 tests of your choice	х	See training above		You can choose sequence
IBM Certified Advanced Application Developer - Lotus Collaborative Solutions	565, 572 561, 563	Certification requires passing all 4 tests	х	See training above		You can choose sequence

# **Lotus Domino R5 Certification - Application Developer**

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
Certified Lotus Specialist - Domino Designer Fundamentals	510	Domino R5 Designer Fundamentals	AD210	Domino Designer Fundamentals	3 Days	1
Certified Lotus Professional - Domino R5 Application Developer	511	(Cert. Lotus Specialist Prereq) Domino R5 Application Security and Workflow	AD240	Domino Application Security and Workflow	2 Days	1
<u>Beveloper</u>	512	Domino R5 Application Architecture	LD270	Domino Application Architecture	2 Days	2
Certified Lotus Professional Principal- Domino R5 Application Developer	273	(Cert Lotus Prof. Prereq) LotusScript in Notes for Advanced Developers	PGN1 PGN2	Introduction to LotusScript in Notes	3 Days	1
Application Developer	513	Using JavaScript in Domino Apps	AD500	Advanced Lotuscript in Notes Using JavaScript in Domino R5 Applications	2 Days	2
	516	Using Java in Domino R5 Apps	AD580	Using Java in Domino R5 Applications	2 Days	3
	517	Maintaining Data Access with LEI	AD310	Maintaining Data Access with LEI	2 Days	3

# **Lotus Domino R5 Certification - System Administration**

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
Certified Lotus Specialist Maintaining Domino R5 Servers and Users	520	Maintaining Domino R5 Servers and Users	SA310	Maintaining a Domino Server Infrastructure	4 Days	1
			SA330	Maintaining Domino Users	1 Day	2
Certified Lotus Professional - Domino R5 System Administrator	521	(Cert. Lotus Specialist Prereq) Implementing a Domino R5 Infrastructure	SA210	Implementing a Domino Infrastructure	3 Days	1
	522	Deploying Domino R5 Applications	SA260	Deploying Domino Applications	2 Days	2
Certified Lotus Professional Principal - Domino R5 Administration	523	(Cert Lotus Prof. Prereq) Transitioning a Domino Infrastructure to R5	SA470	Transitioning a Domino Infrastructure to R5	2 Days	1
	525	Performance Tuning a Domino R5 Infrastructure	SA410	Performance Tuning a Domino Infrastructure	4 Days	2

# **Tivoli Certification**

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Deployment Professional - Tivoli Enterprise Console V3.8	000- 790	Tivoli Enterprise Console V3.8 Event Management Implementation	TM08G TM120 TM28G TM210	Tivoli Enterprise Console V3.8  Programming Rules for Tivoli Enterprise Console V3.8	4 Days 2 Days	2
IBM Certified Deployment Professional - Tivoli Enterprise Console V3.8 Network Management	000- 882	IBM Tivoli Enterprise Console V3.8 Network Management Implementation	TV04G TV070 Or TV06G TV060	Tivoli NetView 7.1 for UNIX Administrators  Tivoli NetView 7.1 for NT Administrators	5 Days 5 Days	1
Tivoli Certified Consultant - Tivoli Storage Manager V5.1  IBM Certified Deployment Professional - Tivoli Storage Manager V5.2	000- 772 000- 872	Tivoli Storage Manager V5.1 Implementation  IBM Certified Deployment Professional - Tivoli Storage Manager V5.2	TM50G TS570 TS572 TV427 TM52G TS580 TS582 TV413 TM56G TS590	Tivoli Storage Manager 5.1 Implementation  TSM Implementation V5.2  ECIS Worldwide course code  Tivoli Storage Manager 5.1 Enhancements  Tuning -Troubleshooting or Adv. Admin  TSM Total Integration V5.2  ECIS Worldwide course code  Tivoli Disaster Recovery Manager 5.1  Implementation	5 Days 4 Days 2 Days	2
IBM Certified Deployment Professional - IBM Tivoli Monitoring V5.1	000- 593	IBM Tivoli Monitoring V5.1 Implementation	TM15G TM150 TV30G TM230	IBM Tivoli Framework IBM Tivoli Monitoring V.5 Advanced Resources SG24-5519-02 IBM or 0738426938 ISBN	3 Days 2 Days	1 2
IBM Certified Deployment Professional - Tivoli Risk Manager_V4.1	000- 796	Tivoli Risk Manager V4.1	TW02G TR030	IBM Tivoli Risk Manager	2 Days	1
IBM Certified Deployment Professional - Tivoli Storage Resource Manager V1.2	000- 789	Tivoli Storage Resource Manager V1.2	TS20G TS200	IBM Tivoli Storage Resource Manager V1.2 Implementation	2 Days	1

# **Tivoli Certification**

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Deployment Professional - IBM Tivoli Configuration Manager V4.2	000- 786	Tivoli Configuration Manager V4.2	TM17G TM170 TV107	Check Prerequisites Skills Tivoli Configuration Manager 4.2 (TV107)  ECIS Worldwide course code PUBs All about Tivoli Configuration Manager V4.2 SG24-6612, ISBN: 0738426679	5 Days	1 2
Tivoli Certified Consultant - Tivoli Access Manager for e-business V3.9	000- 795	Tivoli Access Manager for e-business V3.9 Implementation	TW10G TR390 or TIV45 and	Tivoli Access Manager for e-business V3.9  Tivoli Access Manager for e-business V3.9 Architecture & Solutions SV31-8151	5 Days 15 hrs.	1
			TIV59	Tivoli Access Manager for e-business System Administration SV31-5083 Read PUBs SG24-6556 Enterprise Business Portal for Tivoli Access Mgr.	20 hrs.	2
IBM Certified Deployment Professional - Tivoli Workload Scheduler V8.2	000- 579	IBM Tivoli Workload Scheduler V7.0 Implementation (retired September 30)	TX30G TW010	Tivoli Workload Scheduler V7 Scheduling and Operations (TV 107)	3 Days	1
		IDM Cartified Danlayment	TX25G TW020 NEW	Tivoli Workload Scheduler V7 Administration	2 Days	2
	000- 779	IBM Certified Deployment Professional - Tivoli Workload Scheduler V8.2	TX30G TW050 TV111	Tivilo Workload Scheduler V8 Scheduling and Operations (TV 111) ECIS Worldwide course code	3 Days	1
			TX25G TW040 TV112	Tivoli Workload Scheduler V8 Administration (TV 112) ECIS Worldwide course code	2 Days	2
Tivoli Certified Consultant - IBM Tivoli Access Manager for Business Integration V3.8.1	000- 792	IBM Tivoli Access Manager for Business Integration V3.8.1	TW12G TR440	Tivoli Access Manager for Business Integration System Administration	3 Days	1

Tivoli Sales Mastery Test (visit sales web site for latest information, link is below)

Sales Skill Area	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
Tivoli Solution Sales Professional	M119	Tivoli Sales Mastery Test	Web Lecture	Tivoli Sales 101		1
			Web Lecture	Tivoli Sales 201		2

**WebSphere Portal Certification** 

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Solution Developer - IBM WebSphere Portal for Multiplatforms V4.1, Implementation	344	IBM WebSphere Portal for Multiplatforms V4.1. Implementation	PW531G PW531 or	Check prerequisites IBM WebSphere Portal Version 4 Application Development	4.5 Days	1
		принспани	SW553	IBM WebSphere Portal Version 4 Application Development (ECIS)	4.5 Days	1

**WebSphere Application Server Administrator V5 Certification** 

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified System Administrator WebSphere Application Server V5	340	IBM WebSphere Application Server, V5 Basic Administration	WF381G WF381 OR SW246	WebSphere Application Server Basic Administration V5  Administration of IBM WebSphere Application Server V5 (ECIS)	4 Days	1
IBM Certified Advanced System Administrator WebSpher Application Server V5	341	IBM WebSphere Application Server, V5 Multi-platform Administration	SW246 And SW222	Administration of IBM WebSphere Application Server V5 (ECIS) WebSphere Multi-platform Administration V5 (ECIS)	4 Days 4.5 Days	1

**WebSphere Studio Developer V5.0 Certification** 

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Enterprise Developer IBM WebSphere Studio V5.0 Certification requires tests 155, 486, 483 and 287	155	Sun Certified Programmer for the Java™ 2 Platform (Test 310-025 or 310-035)	SUN JAVA	Sun Certified Programmer for the Java™ 2 Platform - Education		1
	486	Object-Oriented Analysis and Design with UML (or jCert ™ 1D0-538)	OB15G N1942 and Self Study	Practicing Object-Oriented Analysis and Design Review Certification web site: list of self study material, ordering information and other options	4.5 Days	2
Review IBM Certification site for self study information, alternative	484	Enterprise Connectivity with J2EE	Self Study	Review Certification web site for list of self study material and ordering information		3
training, and other acceptable non-IBM tests.		Enterprise Application	Path A	Path A or B		
HOIPIDM (ests.	287	Development using IBM WebSphere Studio V5	SW225 And	IBM WebSphere JSP & Servlet Development (ECIS)	5 Days	4
			SW234 OR	Advanced EJB Development with IBM WebSphere Tools (ECIS)	3 Days	5
			SW235	WebSphere Studio Application Developer V5 for J2EE (ECIS)	5 Days	5
			Path B WF311G GWF311	Servlet & JSP Development for	4.5 Days	4
			OR WF317G	WebSphere using WebSphere Studio Application Developer V5 WF317 e-learning same as WF311	80 Hours	4
			And WF351G WF351 OR	Enterprise JavaBean Development for WebSphere using WebSphere Studio Application Developer V5	4.5 Days	5
			WF356G OR	WF356 e-learning same as WF351	80 Hours	5
			WF601G	WebSphere Studio Application Developer V5 for J2EE	4.5 Days	5

**WebSphere Studio Developer V5.0 Certification** 

Certification Level	Test #	Test Title	Course Code	Recommended Education Offering	Duration	Roadmap Order
IBM Certified Associate Developer IBM WebSphere Studio V5.0	285	Developing with IBM WebSphere Studio V5	WF331G WF331 Or SW232	WebSphere Studio Application Developer V5  Introduction to Java using IBM WebSphere Studio V5 (ECIS)	3 Days 4 Days	1
IBM Certified Solution Developer- IBM WebSpher Studio V5.0	1D0- 532 310-xx	CIW jCert  or  Sun Certified Programmer for the Java ™ 2 Platform (Test 310-025 or 310-035)	Options	Review certification site  http://www-1.ibm.com/certify/certs/a dsdwssv5.shtml		1
	286	Application Development with IBM WebSphere Studio V5	WF311G WF311 OR WF317G OR SW225	Servlet and JSP Development using WebSphere Studio Application Developer V5 e-learning same as WF311 Servlet and JSP Development (ECIS)	4.5 Days 60 Hours 4.5 days	2 2 2

# **WebSphere Sales Mastery Test**

(visit sales web site for latest information, link is in table below. WebSphere sales training is being updated)

Sales Skill Area	Test #	Test Title	Course	Recommended Training Offering	Duration	Roadmap
			Code			Order
WebSphere Solution Sales	M125	WebSphere Sales	Web Lecture	WebSphere Sales 101		1
<u>Professional</u>		Mastery Test		Both courses are being updated		
			F2F or	WebSphere Sales 201		2
			Web Lecture			

WebSphere Business Integration (MQSeries Integrator and Workflow Certification)

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Specialist - MQSeries V2 Integrator	294	MQSeries Installation and Configuration	MQ01 MQ010 And	MQSeries Introduction	1 Day	1
		Training is available on various platforms	MQ15 MQ151	MQSeries System Administration	3 Days	2
	290	MQSeries System Planning and Design	And MQ03 MQ030 And	WebSphere MQ Integrator System Architecture and Design	1 Day	3
09	095	Test 294 replaced test 095 Test 095 will be accepted until 12/31/2003	MQ66 MQ660	MQSeries Integrator V2 Workshop	5 Days	4
IBM Certified System Administrator - WebSphere MQ V5.3	294	IBM WebSphere MQ V5.3 System Administration	MQ01 MQ010 And	MQSeries Technical Introduction	1 Day	1
			MQ15 MQ151	MQSeries System Administration	3 Days	2
IBM Certified Solutions Expert - MQSeries Workflow	092	MQSeries Workflow System Planning and Modeling	MW30 MW300 and	MQSeries Workflow Modeling and API Programming	5 Days	1
			MW50 MW500	MQSeries Workflow for S/390 Workshop	3 Days	2

**WebSphere Commerce** 

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified Specialist - IBM WebSphere Commerce Version V5.4	211	IBM WebSphere Commerce Suite V5.4 Implementation	WA243 OR	WebSphere Commerce Suite V5.4 WebSphere System Administration (SV31-8083-01)	CD (10 hrs.)	1
			WA241G WA241 And	WebSphere Commerce Suite V5.4 System Administration	4 Days	1

WA40	WebSphere Commerce V5.4 Business	CD	2
	Management (SV31-8077-02)	(8 hrs.)	
	WA403 is required after		
	WA243 or WA241		

# e-business Certification

Certification Level	Test #	Test Title	Course Code	Recommended Training Offering	Duration	Roadmap Order
IBM Certified for e-business - Solution Advisor	814	IBM e-business Solution Sales	EBSE	e-business Sales Essentials	Self Study	1
			IN12 B3005	e-business: Selling Workshop	2 Days	2
			Б3005	Additional study material available Review certification site		
IBM Certified for e-business - Solution Designer	811	Designing IBM e-business Solutions	EB90	e-business Fundamentals SV31-6766	CD	1
			IN74 N3102	e-business Fundamentals	2 Days	1
			IN21 B3106	e-business Technology Workshop	5 Days	2
			IN23 P3206	Designing Integrated Solutions Workshop	5 Days	3
IBM Certified for e-business - Solution Technologist	812	e-business Core Knowledge	IBM Certified	An Approved IBM Product Implementation or Development		1
		EB90	Certification (Prerequisite) e-business Fundamentals SV31-6766	CD	2	
			IN74 N3102	e-business Fundamentals	2 Days	

## CF03 - DB2 Family Fundamentals

Course Code: CF03 WW, CF030 US, CF03C Canada,

**Duration: 2.0 Days** 

#### Overview:

This course provides you with information about the functions of Database 2 (DB2), IBM's relational database which may be installed under a variety of operating systems on many hardware platforms. DB2 runs under the MVS, VM, OS/2 and Windows NT operating systems to name a few.

The course includes discussion of how the DB2 products provide services. The focus is on the services DB2 provides and how we will work with DB2, not on its internal workings.

#### Audience:

Anyone who needs introductory knowledge of DB2 and persons preparing for advanced and specialised DB2 training.

## Objectives:

After completing this course, you should be able to:

- List and describe the major components of IBM's relational databases most components apply to all DB2s but technical details of this course focus on DB2 UDB for OS/390 and DB2 UDB for UNIX. Windows. OS/2
- Explain the characteristics of a DB2 table
- Identify the characteristics of various DB2 column data types
- Comprehend the processing instructions given to DB2 via simple SQL statements
- List and describe several ways to build (write) and execute SQL statements
- List and describe steps needed to imbed SQL statements in an application program
- Explain some of the functions performed by, and responsibilities of, Database and System Administrators
- Understand the basic concepts of data modelling
- Describe the concepts involved with distributed data and some implementation considerations
- Describe data warehousing and some of the products involved
- Establish a base for more specialized DB2 training

#### **Course Contents:**

- DB2 Overview
- Hats in DB2
- DB2 From an End-User's perspective

- DB2 From a Programmer's perspective
- DB2 From an Administrator's perspective
- Introduction to Data Modeling
- Where Do I Go Next?

## Course Delivery:

This course is structured in a lecture only format.

## CT3B - DB2 Family Fundamentals - (CD-ROM)

Course Code: CT3B

Duration: 8 Hours

#### Overview:

Your entire Information Technology (IT) organization will benefit from this introduction to DB2. Learn about the functions and services of DB2, IBM's relational database. The focus is DB2 for OS/390, DB2 Universal Database, and DB2 for AS/400. This self-paced, interactive training is a collection of independent modules, which you can select, depending on your job responsibility. Training for DB2 running under the MVS, VM, OS/2, Windows NT, and other operating systems is provided.

## Audience:

Anyone who needs introductory knowledge of DB2 and persons preparing for advanced and specialized DB2 training.

## Objectives:

After completing this course, you should be able to:

- List and describe the major components of IBM's relational databases
- Explain characteristics of a DB2 table
- Identify characteristics of various DB2 column data types
- Comprehend processing instructions via simple Structured Query Language (SQL) statements
- Describe several ways to build and execute SQL statements
- Detail steps to imbed SQL statements in an application program
- Explain functions performed by and responsibilities of database and system administrators
- Understand the basic concepts of data modeling
- Describe the concepts involved with distributed data and implementation considerations
- Describe warehousing and products involved

### **Course Contents:**

#### Overview

File systems

- Database Management System (DBMS) versus Relational Database Management System (RDBMS)
- SQL
- IBM platforms
- Table characteristics
- Hats

## DB2 for the end user

- Writing SQL
- Ways to run SQL

## DB2 for programmers

- Creating a test environment
- Traditional programming role
- Preparing a program for execution
- Static versus dynamic SQL
- Application generators
- DB2 for administrators
- System administrator
- Database Administrator (DBA)
- Indexes
- Views
- DROP
- Locking
- Utilities
- Other DBA tasks
- Security
- Data modeling and database design
- Business modeling
- Data modeling
- Table and column names
- Data types
- NULLs
- Related data
- Association table
- Referential integrity
- Triggers
- Normalization

- Distributed data considerations
- Planning for distributed data
  - Types of distributed scenarios
  - Security considerations
  - Management approach
  - Current technology trends
  - Distributed terminology
  - Data warehouse
  - Data replication
  - Data mining
  - Online Analytical Processing (OLAP)

## Course Delivery:

This course is delivered by CD-ROM in a self-study format.

## CF10- DB2 Universal Database Programming Fundamentals

Course Code: CF10 WW, CF103 US, CF10C Canada

**Duration: 2.0 Days** 

## Overview:

This course enables you to acquire the skills necessary to produce application programs that manipulate DB2 databases in a UNIX, Windows NT, Windows 95, or OS/2 environment. Emphasis is on embedding Structured Query Language (SQL) statements and preparing programs for execution.

#### Audience:

Programmers responsible for producing application programs that manipulate DB2 databases and execute in the UNIX, Windows, and/or OS/2 environments.

This course addresses use of static embedded SQL. If your programming needs involve the use of Call Level Interface (CLI), or ODBC, you should attend the DB2 Call Level Interface Programming course. If your programming needs include the use of stored procedures, user defined functions (UDFs), application programming interfaces (APIs), or dynamic SQL, you should attend DB2 UDB Advanced Programming course in addition to this course.

Programmers with static SQL coding experience on another platform, such as DB2 for OS/390, should NOT attend this course, but may be interested in attending DB2 UDB Advanced Programming.

### Prerequisites:

Before taking this course, you should be familiar with SQL. You should also be familiar with the C programming language. The lab will provide a C skeleton program that will be completed by the student. These skills can be acquired by attending:

- DB2 Fundamentals
- SQL Workshop
- Introduction to C Programming

Equivalent experience may be substituted for these courses.

#### Objectives:

After completing this course, you should be able to:

- Connect to local and remote DB2 databases
- Incorporate static SQL statements in an application program
- Prepare programs for execution
- · Discuss relational concepts
- Describe database locking from an application programming perspective
- Discuss program and DB2 options relative to performance of static SQL

#### **Course Contents:**

- DB2 Workstation Overview for Programmers
- Program Structure, Program Preparation as well as Performance Considerations

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## CF11 - DB2 Universal Database Advanced Programming

Course Code: CF11 WW, CF113 US, CF113CE Canada

**Duration: 3.0 Days** 

## Overview:

This course teaches you how to take advantage of advanced programming techniques to access DB2 databases in the workstation environment. These techniques can be utilized in addition to standard embedded SQL calls that are addressed in the prerequisite offering, DB2 UDB Programming Fundamentals.

#### Audience:

Application programmers and other technical personnel who are involved in designing and implementing applications that access DB2 data from a workstation environment.

## Prerequisites:

Before taking this course, you should be able to:

- Code embedded, static SQL applications
- Discuss relational database concepts
- Use basic C language syntax components

These skills can be developed by taking

- Introduction to C Programming
- DB2 UDB Programming Fundamentals

Equivalent experience may be substituted for these courses.

Application programming experience with other relational database systems, such as DB2 MVS, DB2/VSE and VM, and DB2/400, would be appropriate for meeting the DB2 prerequisites.

## Objectives:

After completing this course, you should be able to:

- Use Object-Relational capabilities of DB2 UDB such as LOB manipulation, User-Defined Functions, and User Defined Distinct Types
- Code dynamic SQL applications
- Code stored procedures and call such procedures
- Use product defined Application Programming Interfaces (APIs)
- Identify factors that influence application performance of alternatives to static SQL

## **Course Contents:**

- Introduction and Static Coding Review
- Dynamic SQL Programming, and Stored Procedures
- Introduction to Call Level Interface, and Object-Relational Capabilities
- Application Programming Interfaces (APIs)
- Performance Considerations for Alternatives to Static SQL

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

CT3A - DB2 SQL Workshop - (CDROM)

Course Code: CT3A

Duration: 8 Hours

#### Overview:

Learn to use Structured Query Language (SQL) including Data Manipulation Language (DML), Data Definition Language (DDL), and Data Control Language (DCL). Focus on the flexibility and functionality of the SELECT statement. This course is a collection of interactive and independent modules in order to meet the needs of your entire Information Technology (IT) staff.

Optional lab exercises can be installed on your DB2 system to provide you up to six hours of additional programming practice. Frequently Asked Questions (FAQs) have also been included to provide technical answers to your SQL questions while you perform these exercises.

## Audience:

DB2 end users, programmers, operators, database administrators, and system Administrators.

## Prerequisites:

No database skills are required

## Objectives:

After completing this course, you should be able to:

Write basic SQL statements to:

- Use DML: SELECT, INSERT, UPDATE, and DELETE statements
- Use DDL: CREATE, ALTER, and DROP statements.
- Use DCL: GRANT and REVOKE

#### **Course Contents:**

- Simple SQL queries
- Column functions and grouping
- Scalar functions and CASE expressions
- Retrieving data from multiple tables
- Union
- Using subgueries
- Maintaining data

## Course Delivery:

This course is delivered in a Self Study, CBT format.

Course Code: CF12 WW, CF120 US, CF120E Canada

**Duration: 2.0 Days** 

## Overview:

This course provides an introduction to the SQL language and applies to the entire DB2 Family. It is appropriate for customers working in an OS/390, VM/VSE, AIX, Windows, or OS/2 environment.

#### Audience:

Everyone needing to perform SQL queries in practice, for example, end-users, programmers, application designers, database administrators, and system administrators who do not yet have knowledge of the SQL Data Manipulation Language (DML).

## Prerequisites:

- Basic computer literacy
- Basic editing skills
- No database skills are required

## **Objectives:**

After completing this course, you should be able to: Write basic SQL statements

- Use (write) SELECT, INSERT, UPDATE, and DELETE statements
- Use simple CREATE TABLE and CREATE VIEW statements

#### **Course Contents:**

This course covers the following major topics:

- Structure and Elements of SQL
- SQL Queries
- Retrieving Data from Multiple Tables
- Scalar Functions and Arithmetic
- Column Functions and Grouping
- Combination of Multiple Result Tables
- Using Sub-queries
- Maintaining Data

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

CF12 - DB2 SQL Workshop

CT13 - DB2 Advanced SQL Workshop - (CDROM)

Course Code: CT13

Duration: 4 Hours

#### Overview:

Learn how to code simple data definitions and complex SELECT statements, advanced subqueries, and nested table expressions. Optional lab exercises provide an additional four hours of programming practice. Frequently Asked Questions (FAQs) are available in one location for easy reference. This self-paced, interactive training is a collection of independent modules, which you can select, based on your job responsibility.

#### Audience:

DB2 end users, programmers, operators, database administrators, and system Administrators.

## Prerequisites:

You should complete:

- DB2 SQL Workshop (CF12) or
- DB2 SQL Workshop (CD-ROM) (CT12)

### Objectives:

After completing this course, you should be able to:

- Write complex Structured Query Language (SQL) statements to implement referential integrity, inner and outer joins, advanced subqueries, and nested table expressions
- Identify index use and performance issues

## **Course Contents:**

- Referential integrity
- Inner and outer joins
- Advanced subquery topics
- Nested table expressions
- Indexes and performance

#### Course Delivery:

This course is delivered in a Self Study, CBT format.

CT28 - DB2 UDB for Experienced Relational DBAs (CD-ROM)

Course Code: CT28

Duration: 8 Hours

#### Overview:

Experienced Database Administrators (DBA) from other relational database backgrounds or other platforms can take this fast path to learn how to administer an IBM DB2 Universal Database (UDB). Learn the skills needed for IBM Certification Test 513 - DB2 UDB V7.1 Database Administration or IBM Certification Test 510 - DB2 UDB V6.1 Database Administration

### Audience:

Skilled relational DBAs on other relational databases or platforms who are responsible for implementing and maintaining an IBM DB2 Universal Database.

## Prerequisites:

You should be able to:

- Perform basic database administration tasks on a relational database system
- Use basic Operating System (OS) functions, such as:
  - Utilities
  - File permissions
- OHierarchical file system
- <sup>O</sup>Commands
- o<sub>Editor</sub>
- <sup>O</sup> State the functions of the Structured Query Language (SQL) and be able to construct Data Definition Language (DDL), Data Manipulation Language (DML), and authorization statements
- <sup>O</sup>Discuss basic relational database concepts, such as:
- o<sub>Locking</sub>
- ORecovery and security
- <sup>O</sup>Objects, such as tables, indexes, view, and joins

#### Objectives:

After completing this course, you should be able to:

- Describe the components of DB2 UDB
- Implement DB2 UDB security
- Perform basic DB2 UDB administration using commands or the Graphical User Interface (GUI)
- Perform the tasks necessary to support a basic recovery strategy
- Describe the application development process with respect to DB2 considerations

## **Course Contents:**

- Overview of DB2 UDB
- Introduction to DB2 UDB certification
- Getting Started with DB2 UDB GUIs
- Creating databases
- Creating objects
- Moving Data
- Recovery
- Monitoring and problem determination
- Concurrency
- Application alternatives
- Application performance
- Security

## Course Delivery:

This course is delivered in a Self Study, CBT format.

## CF20 - DB2 Universal Database Administration Workshop for Linux

Course Code: CF20 WW, CF201 US, CF20C Canada

**Duration: 4.0 Days** 

### Overview:

This course teaches you how to perform basic database administration tasks using IBM DB2 Universal Database (UDB) for Linux. These tasks include creating and populating databases and implementing a logical design to support recovery requirements.

#### Audience:

Database Administrators and other technical personnel who are involved in planning, implementing, and maintaining DB2 UDB for UNIX databases.

## Prerequisites:

Before taking this course you should be able to:

- Use basic UNIX functions such as utilities, file permissions hierarchical file system, commands, and the vi editor
- State the functions of the Structured Query Language (SQL) and be able to construct DDL, DML, and authorization statements
- Discuss basic relational database concepts and objects such as tables, indexes, views, and joins

These skill can be developed by taking

- Linux Basics
- SQL Workshop
- DB2 Family Fundamentals

### Objectives:

After completing this course, you should be able to:

- Administer a DB2 UDB database system using commands and GUI tools
- Implement DB2 security
- Perform basic administration of a DB2 database system
- Manage System Managed Storage (SMS) and Database Managed Storage (DMS) databases and apply data placement principles
- Implement a given logical database design using DB2 UDB to support integrity and concurrency requirements
- List and describe the components of DB2 Universal Database
- Define a DB2 UDB recovery strategy and perform the tasks necessary to support the strategy
- Describe the application development process with respect to DB2 UDB considerations

#### **Course Contents:**

- Overview of DB2 Universal Database
- Getting Started with DB2 UDB GUIs
- Creating Databases and Creating Objects
- Moving Data
- Recovery as well as Monitoring/Problem Determination
- Concurrency
- Application Alternatives and Application Performance
- Security

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

CF21 - DB2 Universal Database Administration Workshop for UNIX

Course Code: CF21 WW, CF210 US, CF21C Canada

**Duration: 4.0 Days** 

#### Overview:

This course teaches you how to perform basic database administration tasks using IBM DB2 Universal Database. These tasks include creating and populating databases and implementing a logical design to support recovery requirements.

#### Audience:

Database Administrators and other technical personnel who are involved in planning, implementing, and maintaining DB2 databases.

## Prerequisites:

Before taking this course you should be able to:

- Use basic operating system functions such as utilities, file permissions, hierarchical file system, commands, and editor
- State the functions of the Structured Query Language (SQL) and be able to construct DDL, DML, and authorization statements
- Discuss basic relational database concepts and objects such as tables, indexes, views, and joins

These skill can be developed by taking

- OS Training
  - AIX/6000 for Users or AIX Version 4 Basics
  - OS/2 for Users
  - Administering Microsoft Windows NT 4.0
- SQL Workshop
- DB2 Universal Database Fundamentals

## Objectives:

After completing this course, you should be able to:

- List and describe the components of DB2 Universal Database
- Implement DB2 security
- Perform basic administration of a DB2 database system
- Define a basic DB2 recovery strategy and perform the tasks necessary to support the strategy

## **Course Contents:**

- Overview of DB2 Universal Database
- Getting Started with DB2 UDB GUIs
- Creating Databases

- Creating Objects
- Moving Data
- Recovery
- Monitoring/Problem Determination
- Concurrency
- Application Alternatives
- Application Performance

## **Course Delivery:**

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## CF23 - DB2 Universal Database Administration Workshop for NT

Course Code: CF23 WW, CF230 US, CF230C Canada

**Duration: 4.0 Days** 

#### Overview:

This course teaches you how to perform basic database administration tasks using IBM DB2 Universal Database. These tasks include creating and populating databases and implementing a logical design to support recovery requirements.

## Audience:

Database Administrators and other technical personnel who are involved in planning, implementing, and maintaining DB2 databases.

#### Prerequisites:

Before taking this course you should be able to:

- Use basic operating system functions such as utilities, file permissions, hierarchical file system, commands, and editor
- State the functions of the Structured Query Language (SQL) and be able to construct DDL, DML, and authorization statements
- Discuss basic relational database concepts and objects such as tables, indexes, views, and joins

These skill can be developed by taking

- OS Training
  - AIX/6000 for Users or AIX Version 4 Basics
  - OS/2 for Users
  - Administering Microsoft Windows NT 4.0
- SQL Workshop

DB2 Universal Database Fundamentals

## Objectives:

After completing this course, you should be able to:

- List and describe the components of DB2 Universal Database
- Implement DB2 security
- Perform basic administration of a DB2 database system
- Define a basic DB2 recovery strategy and perform the tasks necessary to support the strategy

#### **Course Contents:**

- Overview of DB2 Universal Database
- · Getting Started with DB2 UDB GUIs
- Creating Databases
- Creating Objects
- Moving Data
- Recovery
- Monitoring/Problem Determination
- Concurrency
- Application Alternatives
- Application Performance

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## CF83 - DB2 UDB for OS/390 Database Administraion

Course Code: CF83 WW, CF830 US

**Duration: 4.5 Days** 

#### Overview:

Learn how to physically implement a logical database design in DB2. Learn about DB2 data management, DB2 catalog tables, recovery considerations, the bind process, database utilities such as LOAD, REORG, COPY, RECOVER, RUNSTATS and security considerations. Complete significant hands-on exercises for many of the topics. Learn about DB2 Universal Database (UDB) for OS/390 Version 7.

#### Audience:

DB2 UDB for z/OS and OS/390 database administrators or individuals who need to acquire the basic skills required to administer a DB2 Database

## Prerequisites:

You should complete:

- DB2 Family Fundamentals (CF030)
- DB2 SQL Workshop (CF120)

or have equivalent experience. You should also be able to:

- Design a relational table
- Use the Structured Query Language (SQL) data manipulation statements to access and change the contents of DB2 tables
- Define DB2 security privileges and authorities and use the SQL control statements required to implement this security

## **Course Contents:**

- Define and maintain the objects that make up a DB2 database Describe how data is stored in a DB2 database
- Resolve referential and check constraint violations.
- Load external sequential input data into DB2 tables
- Gather statistics about DB2 data Reorganize DB2 data
- Define the basic principles of DB2 recovery
- Recover a damaged table space to current
- Compress data
- Describe the fundamental difference between static and dynamic SQL programs
- Describe the process to bind a DB2 application program

Control access to DB2 objects

### Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course.

## CF84 - DB2 UDB OS/390 Advanced Database Administration Part 2

## Course Code CF84 WW, CF840 US

#### Overview

DB2 This course is a continuation of DB2 UDB for z/OS and OS/390 Database Administration Workshop (CF830). Learn how to perform additional database administration tasks. Also, learn several of the topics introduced in CF830 in greater detail.

#### Audience:

DB2 UDB for z/OS and OS/390 database administrators or individuals who have basic DB2 database skills and want to extend their skills

#### Prerequisites:

You should complete

DB2 UDB for OS/390 Database Administration (CF83)

#### **Course Contents:**

- CF830 to CF840 transition
- LOAD and REBUILD INDEX performance and availability
- REORG and UNLOAD performance and availability
- Generic utility jobs
- Program preparation and use of packages
- Utility Central Processing Unit (CPU) and elapsed time estimations
- UDTs, UDF, and stored procedures
- Triggers LOB Performance

Locking

## Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course

## Course Code: CG82 WW, CG082 US

## **Duration: 2 Days**

#### Overview:

In this course you will learn the technical information about all the new functions in DB2 Universal Database (UDB) for Linux, UNIX, and Windows, since the release of Version 7.2.

- Describe the new features and functions of DB2 UDB for Workstations Version 8.1 (since the release of V7.2)
- Assess the applicability of these new features to your environment
- Discuss the advantages and potential impact of this release of DB2

#### Audience:

This course is designed for existing V7 DBAs

## Prerequisites:

The students should be certified in DB2 V7

#### Course Contents:

- Introduction and overview
- Usability enhancements
- Application development enhancements
- Multidimensional clustering
- Administration enhancements
- Performance and scalability
- Structured Query Language (SQL) enhancements
- Information integration overview

## Course Delivery:

This course is structured in a lecture/lab format.

## Course Code: DW11 WW, DW110 US

### **Duration: 4.5 Days**

#### Overview:

This course teaches students practical methods and techniques for designing and constructing a data warehouse. Students will learn how to apply the techniques in the context of an incremental data warehouse development process which is suitable for constructing a data warehouse from a departmental perspective. In addition, students will also learn how this process can further be extended for the construction of consistent, corporate-wide data warehouses. As such, the course is suitable for students who wish to learn how to construct a data mart as well as a corporate-wide, integrated data warehouse.

During the course, students will apply the techniques they learn doing several exercises which are part of a case study which is consistently developed throughout the course. This approach greatly enhances the practical value of the course, by allowing students to apply the acquired knowledge in practice, under the guidance of the instructor.

#### Audience:

This course is designed for students who have a reasonable knowledge of and some experience with data modeling and with database design and construction techniques in general:

- data modelers and database designers
- database administrators and data architects
- · data warehouse project leaders with a technical interest in the matter
- all other technical professionals with an interest in designing and constructing a data warehouse environment

#### Prerequisites:

The students should be familiar with relational database design and with relational database management systems in general. Being familiar with entity-relationship modeling as well as with DB2 on any platform will be helpful, but both are not required.

## Objectives:

Upon successful completion of this course, the students will:

- have a thorough understanding of what a data warehouse is and how it can be enabled.
- be able to apply data warehouse enablement techniques in practice, in projects of nontrivial scope.

#### **Course Contents:**

- An Introduction to Data Warehousing and Data Warehouse Environment Architecture
- Basic principles of OLAP and Multi-Dimensional Data Modeling
- Data Warehouse Modeling and Design

- Using the Data Warehouse A Perspective on Decision Support as well as Applications
- Design and Construction of the Data Warehouse Populating as well as Subsystem

## Course Delivery:

This course is structured in a lecture/lab format.

The hands-on sessions form a vital, integral part of the course.

## DB2 Information Management Sales 101

#### Course Code DM101

#### Overview

Companies look to you to provide them the sales skills to help assess their IBM DB2 Information management needs and recommend solutions. Business Partners with the greatest knowledge and skills provide themselves and their companies the best chance to succeed in this new and exciting internet economy. The DB2 Information Management Sales 101 is the first of three steps to help you obtain these sales skills (for roadmap details, see the <a href="Sales Roadmap">Sales Roadmap</a>). The DB2 Information Management (IM) Sales 101 provides a valuable opportunity for you to increase your sales skills for the DB2 IM portfolio offerings including Business Intelligence, Content Management, and DB2 Database Servers.

## Who should take this course

To attend, your firm must be an active Business Partner in PartnerWorld for Software.

## What you are taught

This online course helps you to obtain the basic DB2 IM product sales skills including product overviews, selling in vertical industries, as well as specifics like how to make a call on the customer to get the ROI information you need to sell Content Management. **Objectives:** 

- Describe the IBM DB2 IM solutions.
- Identify the components of the DB2 IM solutions.
- Explain the value of DB2 solutions.
- Learn how to identify DB2 IM opportunities

#### **Prerequisites**

There is no prerequisite knowledge required to attend the DB2 Information Management Sales 101 class.

#### How to enroll

Link to PartnerWorld University for the online DB2 IM Sales 101 course.

#### Course details

Duration: up to approximately 5 hours, depending on which modules are taken

Delivery Method: Classroom

Cost: Free

Visit the Software Sales Education Web site for more information on the IBM Software Sales Roadmap.

## DB2 Information Management Sales 201

### Course Code DM 201

#### Overview

Business Partners with the greatest knowledge and skills provide themselves and their companies the best chance to succeed in selling DB2 Information Management (IM). The DB2 IM Sales 201 is the second of three steps in the DB2 Information Management Software Sales Roadmap to help you obtain the skills you need to succeed. The DB2 Information Management Sales 201 course is a one-day, interactive sales workshop and is designed to educate Business Partners on how to recognize IBM DB2 IM sales opportunities.

The IBM DB2 IM Sales Education is designed to maximize your time out of the territory by following this three-step roadmap:

- Step 1: Taking the DB2 IM Sales Sales 101 online training available on PartnerWorld University.
- Step 2: Attending the DB2 IM Sales 201 workshop scheduled for availability during 3Q 2003.
- Step 3: DB2 Sales Mastery Test online scheduled for availability during 3Q 2003.

#### Who should take this course

The DB2 IM Sales 201 course is designed for PWSW Business Partner Sales professionals who need to build selling skills for DB2 software solutions. To attend, your firm must be an active Business Partner in PartnerWorld for Software.

## What you are taught

You will learn how to identify a qualified opportunity, gather customer information, design a Data Management solution and advance the sale - all which you will apply practically to a case study.

The expectation from your participation in this workshop is that you will use your knowledge to successfully sell IBM DB2 Information Management solutions in your

accounts.

## Prerequisites

The required prerequisites are the DB2 Information Management Sales 101 course.

#### How to enroll

This course is scheduled for availability in 3Q2003.

### Course details

Duration: One day

Delivery method: Classroom

Cost: Free

## OD1001 - A Guide for the CM OnDemand Administrator

Course Code: OD1001

**Duration: 5.0 Days** 

#### Overview:

This course is designed for the person responsible for creating and loading applications into their OnDemand System. It is intended to provide a basic understanding of all areas of the OnDemand system.

#### Audience:

Anyone interested in learning the OnDemand for Multiplatforms system or IBM Content Manager OnDemand for  $z/OS^{TM}$  and OS/390®, V7.1.

#### **Prerequisites**

Before taking this course students should possess basic AIX®/UNIX®, Windows NT® server, or z/OS, OS390 knowledge and be familiar with a mouse in Windows® 95 or NT.

#### Objectives:

After completing this course, you should be able to:

- Understand the basics of OnDemand
- Start the OnDemand Administrator Interface
- Understand Library and Object servers
- Understand Storage Management
- Add a User to the OnDemand system
- Add a Group to the OnDemand system
- Understand OnDemand Storage Sets

- Perform Indexing Understanding and Using ACIF
- Create an Application Group
- Create an Application
- · Create a Folder
- Prepare to install and support OnDemand
- · Calculate storage requirements
- Manage the OnDemand Index Tables

Students will receive a course book which contains copies of all the presentation material as well as the exercises and the answers

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## OD1002 - CM OnDemand Applications Workshop

Course Code: OD1002

Duration: 2.5 Days

#### Overview:

This course separates the UNIX/NT or z/OS , OS390 command-level information from the more advanced indexing/application tasks. It provides a deeper understanding of indexing and loading both AFP and line data in multiple data formats. Significant time is spent on the AFP datastream. The student will have an opportunity to index, load, and view many different reports with an emphasis on end-user considerations.

#### Audience:

This course is designed for experienced OnDemand administrators who need a deeper understanding of indexing and loading both AFP and line data in multiple data formats.

#### **Prerequisites**

Before taking this course students should have attended the introductory OnDemand class, A Guide for the OnDemand Administrator (OD1001) and have two (2) months solid working experience with the IBM OnDemand system at their site.

#### Objectives:

After completing this course, you should be able to Understand:

- AFP structures
- Indexing AFP documents
- Line data indexing

- Generic index
- PDF indexing
- exercises in:
- Grouprange
- Pagerange
- Page and base trigger parameter creating a generic index for loading image data

Students will receive a course book which contains copies of all the presentation material as well as the exercises and the answers

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## OD1003 - CM OnDemand Systems Workshop

Code: OD1003

Duration: 2.0 Days

### Overview:

The course separates the UNIX/Windows NT command-level information from the more advanced indexing/application tasks. It focuses on UNIX/Windows NT environment by using shell scripts to generate load and retrieval statistics, system monitoring (including UNIX/Windows NT and OnDemand system log), problem determination, usage scenarios and handling system messages.

#### Audience:

This course is designed for experienced OnDemand administrators who need a deeper understanding of the UNIX/Windows NT system environment.

## **Prerequisites**

Before taking this course students should have attended the introductory OnDemand class, A Guide for the OnDemand Administrator (OD1001) and have two (2) months solid working experience with the IBM OnDemand system at their site.

## Objectives:

After completing this course, you should be able to:

- Use the System Log
- Use Shell Scripts and Examples
- Handle User Exit messages
- Perform System Monitoring for Performance and Problem Determination

- Map custom fonts and special code page characters
- Review Usage Scenarios
- Understand ars Command Reference
- Review MVS Download
- Understand Disaster Recovery Overview

Students will receive a course book which contains copies of all the presentation material as well as the exercises and the answers

## **Course Delivery:**

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## ODCS1 Implementing OnDemand for iSeries Server

Course Code: ODCS1

**Duration: 4.5 Days** 

#### Overview:

The Common Server feature of OnDemand for iSeries is a powerful software solution for document and report capture, storage, and retrieval. This feature includes support for archiving spooled files as well as other nontraditional data types (such as images and PC files) in a client/server environment.

The Common Server feature is available at V5R1 and above of OnDemand for iSeries.

#### Audience:

This course is designed for customers who plan to implement the Common Server feature of OnDemand for iSeries, and for business partners and IBMers who will be working with customers using OnDemand.

Experience with the iSeries (AS/400) is required. Students must be able to work with spooled files, output queues, job queues, and commands, and have a basic familiarity with Microsoft Windows and with Client Access Express.

#### Objectives:

Install and use the OnDemand Client Create migration policies for archived documents Create application groups, applications, and folders Index and archive reports Retrieve reports using the OnDemand Client Add and authorize users to OnDemand Automate/tailor OnDemand for your environment

## Certification and Training Quick Reference Guide

## **Course Content:**

Overview of OnDemand for iSeries Common Server Product Structure and Terminology Exploring the End-User Interface Users and Groups Application Groups, Applications, and Folders Migration Policies Output Queue Monitor Definitions

Archiving and Retrieving Reports
Tailoring OnDemand for the End-User
Using the Report Wizard

## N1918 Implementing OnDemand for AS/400

Course Code: N1918

**Duration: 3.5 Days** 

### Overview:

OnDemand for AS/400, allows AS/400 customers to index, store, and retrieve large amounts of spool file and data records to and from Direct Access Storage Devices (DASD), optical, and tape. Learn how to implement the Spool File Archive feature of OnDemand for AS/400 in this lab intensive course.

## Prerequisites:

Experience with the AS/400 is required. You should be able to work with output queues, spool files, job queues, and job descriptions, and be familiar with AS/400 menus and commands.

### Audience:

Individuals who plan to implement the Spool File Archive feature of OnDemand for AS/400, and IBM Business Partners working with customers using OnDemand.

## Objectives:

- Create optical storage groups, reports collections, and report groups
- Create report definitions of different report types
- Automate and tailor OnDemand for your environment
- Use the Graphical Report Definition Tool and the OnDemand Client

## **Course Content:**

- Optical storage groups and report collections
- Report groups and report types
- Creating report definitions DOC, PAGE, NODX, UBND

- Automating and tailoring OnDemand
- Security
- Graphical Report Definition Tool
- OnDemand Client

#### Remarks:

Class Contact: Carol Allen, 919-850-7615, allen@us.ibm.com, tie line: 436-7615, Carol R Allen/Raleigh/IBM.

## A1919 Implementing OnDemand for AS/400 Advanced Topics

Course Code: A1919

## FN611 - Relational Database Design

Course Code: FN611

Duration: 2 Days

#### Overview:

This course is an ideal introduction to relational database concepts and terminology. Through a variety of exercises, learn how to model a business enterprise using the entity-relationship approach to relational database design. Learn data normalization techniques. Gain hands-on experience creating a database and tables using the Data Definition Language portion of Structured Query Language.

#### Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

## Prerequisites:

No database skills are required

### Objectives:

After completing this course, you should be able to:

- Describe relational technology and its advantages
- Discuss relational database design concepts and terminology
- Construct entity-relationship diagrams to model a business enterprise
- Apply the rules of normalization to a database or database model
- Use SQL to create simple databases, tables, and data integrity constraints
- Use SQL to perform basic INSERT and SELECT operations

### Course Delivery:

This course has Lecture, hands-on and written exercises.

## FN613 - Structured Query Language

Course Code: FN-613

**Duration: 3 Days** 

#### Overview:

This course covers the Data Manipulation Language (DML) portion of Structured Query Language. Learn to create SELECT, INSERT, UPDATE, DELETE, LOAD, and UNLOAD statements, simple and complex joins, and subqueries.

#### Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

### Prerequisites:

FN611 Relational Database Design or equivalent knowledge

### Objectives:

After completing this course, you should be able to:

- Use SQL Data Manipulation Statements (DML) to query and modify data in an Informix database
- Write simple SELECT statements including joins, subqueries, temporary tables, and unions
- Write complex SELECT statements including outer joins, self-joins, and correlated subqueries
- Add and modify data using the INSERT, UPDATE and DELETE statements
- Use LOAD and UNLOAD for bulk data operations

#### Course Delivery:

This course has Lecture, hands-on and written exercises.

L1786 - Informix Red Brick Decision Server Business Queries

Course Code: L1786

**Duration: 2 Days** 

#### Overview:

This course shows how to write typical business queries by using both standard SQL-92 syntax and RISQL extensions to SQL. Students learn how to write inner and outer joins, including joins expressed in the FROM clause, and how to create and call macros within queries. RISQL display functions, CASE expressions, UNION queries, and subqueries are all covered in detail, demonstrating different ways to express questions that involve calculations and comparisons. Students complete extensive hands-on exercises throughout the course, using raw SQL to compose queries.

#### Audience:

End-users, analysts

## Prerequisites:

FN613 Structured Query Language L1855 Data Warehouse Design or equivalent knowledge

#### Objectives:

After completing this course, you should be able to:

- Express business questions as SQL queries
- Write efficient inner and outer join gueries
- Use RISQL display functions to express questions that require sequential calculations
- Express questions that ask for comparisons by using subqueries, CASE expressions, and query expressions in the FROM clause
- Generalize queries by using RISQL macros
- Use SQL-92 syntax to write complex queries

#### Course Delivery:

This course has Lecture, hands-on and written exercises.

## FN757 - Advanced Structured Query Language

Course Code: FN757

Duration: 2 Days

#### Overview:

This course focuses on advanced SQL querying using complex outer joins, correlated subqueries, and other advanced SQL concepts. Learn how to use optimizer directives available in Informix Dynamic Server. Learn the effects of transaction logging and SQL transactions. Develop an SQL code review checklist.

#### Audience:

Application developers, database and systems administrators system analysts, project leaders, technical support personnel

## Prerequisites:

- FN611 Relational Database Design or equivalent knowledge
- FN613 IBM Informix Structured Query Language or equivalent knowledge

## **Objectives:**

After completing this course, you should be able to:

- Interpret the guery plan selected by the optimizer for a specified guery
- Use optimizer directives to influence the optimizer query plan
- Force an index scan or sequential scan of table
- Specify join methods and join order for tables in a query
- Use explicit SQL transaction statements
- Lock various database objects
- Handle locked database objects
- Understand cursors and prepared statements

## Course Delivery:

This course has Lecture, hands-on and written exercises.

## FN848 -Managing and Optimizing Informix Dynamic Server Databases

Course Code: FN848

Duration: 4 Days

#### Overview:

For Informix Dynamic Server and Informix Dynamic Server.2000 database administrators and application developers. Gain experience creating, modifying, and removing databases, tables, and indexes. Learn how to control security, maintain data integrity, maintain concurrency control, and improve performance in the Informix Dynamic Server.2000 environment.

## Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

#### Prerequisites:

- FN611 Relational Database Design or equivalent knowledge
- FN613 IBM Informix Structured Query Language or equivalent knowledge

## Objectives:

After completing this course, you should be able to:

- Select the Informix Dynamic Server.2000 data types appropriate for storing your data
- Create and maintain databases, tables, and indexes
- Implement referential and entity integrity
- Estimate the size and extent requirements for tables and indexes
- Create and maintain fragmented tables and fragmented indexes
- Improve decision support query performance through the use of PDQ (parallel database query)
- Improve query performance through the use of SET EXPLAIN
- Describe concurrency control
- Create an indexing strategy to improve performance
- Plan for and configure triggers
- Create and use views
- Control data security
- Use Informix database management utilities

## Course Delivery:

This course has Lecture, hands-on and written exercises.

- FN-613 IBM Informix Structured Query Language or equivalent knowledge
- FN-848 Managing and Optimizing Informix Dynamic Server Databases
- L2-849 Implementing an Object-Relational Database using Informix Dynamic Server is recommended

## Objectives:

After completing this course, you should be able to:

- Identify the Informix tools available for data migration and reorganization
- Select the best tool for various data migration tasks
- Create High Performance Loader objects: devices, formats, maps, filters, and queries
- Define High Performance Loader objects to provide maximum reusability
- Assemble High Performance Loader objects to create load and unload jobs
- Use the ipload GUI interface to create objects and jobs
- Use the autogenerate features of the High Performance Loader to generate maps, formats, load jobs and unload jobs
- Monitor and tune onpload for optimal performance
- Use Deluxe and Express mode loads
- Troubleshoot common problems with the High Performance Loader

## **Course Delivery:**

This course has Lecture, hands-on and written exercises.

## FN910 - Data Migration and Reorganization

Course Code: FN910 Duration: 2 Days

#### Overview:

For Informix Dynamic Server and Informix Dynamic Server.2000 database administrators and application developers. Gain experience using Informix data movement utilities, including SQL LOAD and UNLOAD, dbload, dbexport, dbimport, onload, onload, and the High Performance Loader. Learn how to select the appropriate tool to move data in and out of tables and databases. Special emphasis is placed on using and tuning the High Performance Loader.

## Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

## Prerequisites:

FN611 Relational Database Design or equivalent knowledge

## L1920 - IBM Informix Red Brick Decision Server Administration

Course Code: L1920 Duration: 4 Days

## Overview:

This course provides practical, hands-on experience with building, loading, indexing, administering, and monitoring an Informix Red Brick Decision Server database. Learn how to create, load, and index database tables, how to segment table and index data, and how to define database users and roles. Learn how to use query-priority concurrency to decrease the load window.

#### Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

## Prerequisites:

- Fundamental knowledge of the UNIX operating system
- FN613 IBM Informix Structured Query Language or equivalent knowledge

## Objectives:

After completing this course, you should be able to:

- Describe the differences between OLTP and data warehousing
- Create an Informix Red Brick Decision Server database
- Create database users and assign security levels
- Connect to a database through ODBC
- Create database tables
- Load and unload data with the Table Management Utility (TMU)
- Create various types of indexes and understand their structure and use
- Segment tables and index data
- Use query-priority concurrency to decrease the load window
- View metadata in the database system tables
- Monitor different database activities
- Use both the command line and the Informix Red Brick
- Decision Server Administrator tool to define and manage the environment

## Course Delivery:

This course has Lecture, hands-on and written exercises.

# L1846 - IBM Informix Dynamic Server Administration

Course Code: L1846

Duration: 4 Days

#### Overview:

This course is intended for Informix Dynamic Server and Informix Dynamic Server system administrators. Learn the skills necessary to successfully administer one or more database servers. Learn how to configure and initialize a database server instance, configure and test client connectivity, configure and manage memory and disk usage, plan and implement system maintenance tasks, and configure the server for optimal OLTP or decision support

#### Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

#### Prerequisites:

- Fundamental knowledge of the UNIX operating system
- FN613 IBM Informix Structured Query Language or equivalent knowledge

## **Objectives:**

After completing this course, you should be able to:

- Describe the Informix Dynamic Server multi-threaded architecture
- Configure an Informix Dynamic Server database server
- Set up a multiple residency environment
- Plan and configure disk and memory usage
- Enable and configure disk mirroring
- Describe basic Informix Dynamic Server recovery and fault tolerance mechanisms
- Configure and manage logical logs
- Manage and optimize index builds and query sort space
- Manage temporary tables and files
- Monitor Informix Dynamic Server activity
- Manage data access by concurrent users
- Allocate memory for decision support queries
- Use the ontage utility to back up and restore data
- Use Informix Server Administrator to manage database servers

## Course Delivery:

This course has Lecture, hands-on and written exercises.

# L1007 - Developing Applications Using Informix 4GL

Course Code: L1007 Duration: 4 Days

#### Overview:

This course introduces you to the powerful features of Informix 4GL, a complete fourth-generation application

development language. Using Informix 4GL, build an integrated application that features easy-to-use menus, data entry screens, reports, and on-line help, all with significantly less code than conventional programming languages require.

#### Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

# Prerequisites:

- Programming experience
- Knowledge of the vi text editor
- Fundamental knowledge of the UNIX operating system
- FN611 Relational Database Design or equivalent knowledge
- FN613 IBM Informix Structured Query Language or equivalent knowledge

# Objectives:

After completing this course, you should be able to:

- Develop custom applications using Informix 4GL
- Create custom menus
- Create custom data entry forms
- Use the Y2K CENTURY attribute
- Effectively use SQL statements in your application
- Integrate on-line help facilities into your application
- Incorporate error-handling routines into your application
- Use transactions in your application
- Produce custom reports
- Use screen arrays
- Insert multiple rows using arrays
- Execute dynamic SQL statements
- Lock database rows during updates

# **Course Delivery:**

This course has Lecture, hands-on and written exercises

## L2791 - Informix Red Brick Decision Server Performance and Tuning

Course Code: L2791

Duration: 3 Days

#### Overview:

Learn how to improve the query and load performance of an Informix Red Brick Decision Server database. Beginning with discussions of methodology and the criteria for good data warehouse design, the central units of the class cover different ways to tune queries: rewriting the SQL, adding indexes, allocating more memory, and so on. The

course ends with a discussion of load performance with the Table Management Utility (TMU).

#### Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

# Prerequisites:

 L1920 Informix Red Brick Decision Server Administration or equivalent knowledge OR six months' experience with Informix Red Brick Decision Server

## Objectives:

After completing this course, you should be able to:

- Apply a proven methodology to query tuning
- Tune queries by using SQL more efficiently
- Pinpoint the time-consuming parts of a query
- Read the EXPLAIN output to evaluate query execution plans
- Identify which guery plan was chosen for a guery and why
- Tune queries by indexing tables efficiently
- Tune queries by allocating memory and parallel processes sensibly
- Optimize table-loading and index-building operations

# **Course Delivery:**

This course has Lecture, hands-on and written exercises

# L2403 - Informix Red Brick Decision Server Performance and Tuning

Course Code: L2403 Duration: 4 Days

#### Overview:

For experienced Informix Dynamic Server database and system administrators. Learn practical information on how to improve performance in your Informix Dynamic Server and UNIX environment. Learn how to monitor and analyze system activity. Learn how to create data distributions to provide better statistics to the optimizer. Learn how to optimize fragmentation strategies and apply guidelines. Learn how to optimize and manage resources in the parallel data query (PDQ) environment. Data loading and indexing are also addressed.

## Audience:

Application developers, database and systems administrators, system analysts, project leaders, technical support personnel.

#### Prerequisites:

Experience using Informix Dynamic Server

- FN848 Managing and Optimizing IBM Informix Dynamic Server Databases
- L1846 IBM Informix Dynamic Server Administration or equivalent knowledge

## Objectives:

After completing this course, you should be able to:

- Use Informix Dynamic Server monitoring utilities
- Identify optimal fragmentation strategies
- Identify strategies for improving data loads and indexing
- Manage memory and CPU system resources
- Tune OLTP environment
- Tune checkpoints

## **Course Delivery:**

This course has Lecture, hands-on and written exercises

# L2748 - Informix Dynamic Server Backup and Restore

Course Code: L2748

Duration: 4 Days

#### Overview:

This course focuses on backup and recovery planning. Through a variety of exercises, you will define what recovery means for your business, identify constraints affecting recovery, and begin to develop a strategy for backup and recovery planning. During the course, you will explore alternative methods for backup and recovery and determine when each should be used. ON-Bar is the primary utility used in class and will be covered in detail along with the

Informix Storage Manager (ISM). Other topics that will be addressed in this course include backup and restore validation, system monitoring, logical log backup, testing the restore strategy, and tuning restore time.

#### Audience:

Database and System Administrators.

#### Prerequisites:

L1846 Informix Dynamic Server Administration or equivalent knowledge

## Objectives:

After completing this course, you should be able to:

- Plan recovery goals
- Identify and select the proper recovery tools
- Explain the Informix backup and restore strategy
- Perform a system backup using the ON-Bar utility

- Configure ISM for use by ON-Bar
- Explain the importance of logical log backup
- Restore an Informix Dynamic Server database server using the ON- Bar Utility
- Backup additional system files
- Test the restore strategy
- Tune recovery objects to optimize restore time

## Course Delivery:

This course has Lecture, hands-on and written exercises

# L2224 - Advanced Informix 4GL Development

Course Code: L2224

Duration: 3 Days

## Overview:

This course covers advanced Informix 4GL topics for the experienced 4GL programmer in a UNIX environment, including standards and tools that are useful for making your development environment more productive. Learn how to implement source code control using Source Code Control System(SCCS), compile applications using makefiles, and debug applications using the Informix 4GL Interactive Debugger. Create a custom runner and debugger for Informix 4GL RDS. Learn how to create and implement 4GL libraries, generic error handling routines, and advanced screen arrays. Learn how to call a C function from a 4GL program. Learn 4GL code, compile, and design optimization techniques. Also covers performance issues related to transactions and locking.

# Audience:

Application developers, project leaders, technical support personnel

#### **Prerequisites**

- Experience developing Informix 4GL applications
- L1007 Developing Applications Using Informix 4GL or equivalent knowledge

#### Objectives

After completing this course, you should be able to

- Use SCCS for source code control
- Compile 4GL applications using MAKE
- Use 4GL stub programs to increase productivity
- Create 4GL libraries

- Implement re-usable error handling routines
- Create advanced screen arrays
- Call a C function from a 4GL program
- Debug applications using the Informix 4GL Interactive Debugger
- Create custom runners and debuggers for Informix 4GL RDS
- Implement 4GL code, compile, and design optimization techniques
- Understand transaction and locking issues related to performance

This course has Lecture, hands-on and written exercises

# L1BSA - System Administration for Informix Dynamic Server Courseware Bundle

Course Code: L1BSA

**CBT Self-Study** 

Bundle Order Number: 590-52981-115011-1

#### Overview:

This courseware bundle was designed specifically to prepare candidates on becoming certified as an Informix Certified System Administrator for Informix Dynamic Server version 7. This bundle includes a collection of Computer Based Training (CBT) titles and the North America training course manual for System Administration for Informix Dynamic Server formerly, course FN388.

The manual and CBT's will demonstrate system administration skills, including how to configure and maintain Informix Dynamic Server database servers. Through a variety of exercises you will learn about the multi-threaded architecture of Informix Dynamic Server. The manual information on basic archive and restore features.

#### Audience

System administrators and implementers of this software

#### **Prerequisites**

- Knowledge of UNIX
- FN613 Structured Query Language or equivalent knowledge

#### Ohiectives

After completing this course, you should be able to:

- Describe the Informix Dynamic Server multi-threaded architecture
- Set up client-server connections
- Configure Informix Dynamic Server

- Set up a multiple residency environment
- Manipulate the operating modes of the database server
- Describe the disk architecture
- Understand basic Informix Dynamic Server checkpoints/recovery
- Use Informix Dynamic Server fault tolerance mechanisms
- Create and manage logical logs
- Understand sorting
- Manage temporary tables and files
- Monitor Informix Dynamic Server activity
- Describe the archive levels that the ontape utility provides
- Perform an archive
- Use ontape to perform a cold and warm restore and to change logging options
- Describe how to measure the performance of your OnLine system
- Discuss the performance factors that determine the placement of tables in your OnLine system
- Describe how to optimize your client/server environment
- Discuss ways of monitoring network performance
- Describe OnLine fast recovery feature
- Explain how mirroring works as fault-tolerance mechanism
- Explain how chunks can be allocated from raw disk space or cooked files
- Describe the structure of dbspace pages and blobspace blobpages
- Outline how OnLine tracks system information
- Explain the two-phase and heterogeneous protocols
- Describe distributed transaction coordination
- Explain heuristic decisions
- Configure two database servers for data replication
- Recover the primary and secondary servers in case of failure
- Discuss Distributed transactions
- Describe the steps needed to initialize an OnLine instance using the ON-Monitor utility
- Describe OnLine's monitoring utilities
- Explain how the onperf utility's tools and components are used
- Discuss the secure auditing facility
- Describe the event alarm feature
- Describe the High Performance loader (HPL)

- Describe the OnLine environment variables used for HPL
- Monitor the HPL
- Use the onstat utility's -j option
- Identify ways of optimizing HPL performance

This bundle includes a collection of Computer Based Training (CBT) titles and the North America training course manual for System Administration

# L2403 - IBM Informix Dynamic Server Performance Tuning

Course Code: L2403 Duration: 4 Days

## Overview:

For experienced Informix Dynamic Server database and system administrators. Learn practical information on how to

improve performance in your Informix Dynamic Server and UNIX environment. Learn how to monitor and analyze

system activity. Learn how to create data distributions to provide better statistics to the optimizer. Learn how to

optimize fragmentation strategies and apply guidelines. Learn how to optimize and manage resources in the parallel data query (PDQ) environment. Data loading and indexing are also addressed.

#### Audience:

Database and system administrators, technical support personnel

## **Prerequisites**

Experience using Informix Dynamic Server

- FN848 Managing and Optimizing IBM Informix Dynamic Server Databases
- L1846 IBM Informix Dynamic Server Administration or equivalent knowledge

#### Objectives:

- After completing this course, you should be able to:
- Use Informix Dynamic Server monitoring utilities
- Identify optimal fragmentation strategies
- Identify strategies for improving data loads and indexing
- Manage memory and CPU system resources
- Tune OLTP environment
- Tune checkpoints

# Course Delivery:

This course has Lecture, hands-on and written exercises

## **AD210: Domino Designer Fundamentals**

Course Code: AD210

Duration: 3.0 Days

## Overview:

This course is a hands-on introduction to the basic skills of working in the Domino Designer development environment. Through instructor lecture and student-centered activities and exercises, students learn how to use Domino design elements to create an application that addresses business needs. By the end of the course, students will be able to incorporate business requirements into basic multi-client applications and to appropriately use many of the R5 Domino Designer design elements.

#### Audience:

The target audience is:

Application developers with no experience using Domino Designer to develop applications.

## Prerequisites:

- Experience using the Notes R5 client to access applications.
- Experience using a Web browser to access applications. Recommendations:
- Completion of the Domino Designer R5 Guided Tour.
- Completion of the Notes R5 Client Guided Tour.
- Experience developing one or more applications using other application development tools.

### **Topics Covered:**

- The Domino application and design environment
- · Creating and modifying pages to display text and graphics
- Creating documents
- Modifying forms and creating fields
- Building views to organize documents
- Making views available to users
- · Formula language basics
- Using formulas to validate and translate fields
- Creating agents to update application information
- Creating view and form actions
- Defining various security levels for application users
- Using hide/when options to display or hide information
- Using links to make application elements available to users
- Structuring the display of the application using framesets
- Using outlines to navigate an application
- Creating an image map including hotspot links

## Course Delivery:

This course is structured in a lecture/lab format.

## AD240 - Domino Application Security and Work Flow

Course Code: AD240
Duration: 2.0 Days

# **Summary Description:**

This course builds on the principles of application development presented in Domino Designer Fundamentals and the Domino Designer Fundamentals Tutorial. Through lecture and hands-on activities, students will learn how to effectively allow and deny access to applications to meet the needs of the organization, and how to add workflow to applications, as well as understand the relationship between workflow and security. Basic quidelines for workflow on the Web are included.

#### Audience:

The target audience is:

Application developers who have experience developing simple, single-database applications.

# Prerequisites:

Completion of the Domino Designer Fundamentals course or equivalent knowledge, skills, and experience.

Completion of the Domino Designer Fundamentals Tutorial course or equivalent knowledge, skills, and experience.

A minimum of three (3) months experience developing and troubleshooting single-database applications.

## **Topics Covered:**

The course covers the following topics:

- · Security models
- Use of groups and roles
- Field level security
- · Document security
- · Inter database vs. intra database workflow
- Intradatabase workflow
- · Interdatabase workflow
- Design dependencies

## Course Delivery:

This course is structured in an Instructor-led, Classroom format.

## AD270 - Domino Application Architecture

Course Code: AD270
Duration: 2.0 Days
Summary Description:

This course offers lectures, demonstrations, and hands-on activities to guide students in learning how to design efficient business applications that leverage the power of Domino.

Given business scenarios, students will design solutions that capitalize on Domino's server requirements, programming choices, multiple client support, and data access capabilities.

#### Audience:

The target audience is:

Domino application developers of all skill levels and all experience levels who want to improve the design of their applications through a better understanding of the underlying architecture of Domino.

## Prerequisites:

You should complete:

- Attendance in the Domino Designer Fundamentals course, the Application Development 1 R4.5 course, the Domino Web Development R4.5 or R4.6 course
- or equivalent knowledge and experience.

## Objectives:

By the end of the course the student should be able to design effective and efficient business applications that support heterogeneous clients and access a variety of data sources.

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## AD310 - Maintaining Data Access with LEI

Course Code: LD310 Duration: 2.0 Days

## Overview:

Lotus Enterprise Integrator is a set of tools which facilitates data transfer and scheduling of jobs. Through lecture and hands-on activities, participants in this course will learn how to integrate Domino applications with external data sources. They will connect disparate databases and transfer data between them in a variety of situations.

## Audience:

The target audience for this course is Domino application developers and system administrators who need to administer applications, develop applications, or both develop and administer applications that connect disparate systems and support high-volume data transfer or scheduling processing jobs.

#### Prerequisites:

Six or more months experience as a Lotus Notes Developer. Experience with LotusScript or a similar programming language is recommended but not essential

## **Topics Covered:**

- · Installing an LEI server in a cluster
- · Creating connection and transfer documents
- Scheduling activities
- Combining dependent activities
- Troubleshooting transfer activities
- Comparing LEI Real Time Notes to DECS
- Basic LEI administration task

#### Course Delivery:

This course is structured in a lecture/lab format.

# AD500 - Using JavaScript in Domino R5 Applications

Course Code: LD500 Duration: 2.0 Days

# **Summary Description:**

Through lecture/demonstration and hands-on exercises, this course provides students with the skills to use JavaScript in the Domino R5 environment, to extend their applications by:

- · Directly manipulating the integrated
- · Document Object Model
- Taking advantage of JavaScript Events in the IDE
- · Reducing server load by performing client-side processing
- · Enhancing data gathering with new techniques
- · Working with frames

## Audience:

The target audience for this course is application developers who develop Notes/Domino applications and want to learn how to use the Document Object Model to develop more dynamic Domino applications for browser clients.

## Prerequisites:

Experience with the Domino R5 Designer client including:

- Creating forms and pages
- · Writing code in the Programmers pane
- Using the design preview options
- Building a frame set and adding frames

Participants should also have programming experience with an object-oriented language. They do not need experience with JavaScript before attending the course.

These skills and others can be gained by attending:

- Lotus authorized courses Application
- Development 1 and Developing Interactive Web Applications 1

or

- Domino Web Development
- Domino Application Development Update

## **Topics Covered:**

The course covers the following topics:

- Defining JavaScript
- · Changing a document's properties
- Coding a link hotspot with JavaScript
- Creating a submit button
- Writing and retrieving input values
- Validating fields in browser
- Formatting user inputs
- · Building a list of choices
- Retrieving and adding single values in a select object
- · Retrieving multiple values in a select object
- Building dialog boxes
- · Opening pages in frames using JavaScript
- Creating rollover buttons

## Course Delivery:

This course is structured in an Instructor-led, Classroom format.

## AD580 - Using Java in Domino R5 Applications

Course Code: AD580

Duration: 5.0 Days

## Overview:

This workshop combines instructor lecture and demonstration with hands-on exercises to teach Notes/Domino developers how to use Java to manipulate the functionality of Domino applications and the Domino objects.

## Audience:

Is application developers who will need to use Java to build Domino agents and write Java applets and stand-alone applications that access Domino data.

## Prerequisites:

Lotus Education's Domino Designer Fundamentals or equivalent experience, and Lotus Education's Domino Application Architecture

#### **Topics Covered:**

The course covers the following topics:

- · Java features
- · Java objects and classes
- Writing a Java Agent in Domino
- · Using variables and values
- · Writing Java code for looping and branching
- Writing simple Java applets
- · Accessing Domino data with a Java application
- Writing Java applets that take advantage of CORBA
- Using LiveConnect

This course is structured in a lecture/lab format.

## PGN1 - Introduction to LotusScript in Notes

Course Code: PGN1 Duration: 3.0 Days

# **Summary Description:**

This accelerated, three-day course enables students to learn the fundamental skills necessary to work with LotusScript in the Notes environment. We will cover both the LotusScript language constructs and the Notes objects necessary to access databases, open documents, and manipulate document contents.

#### Audience:

The target audience is:

Notes developers who want to expand their applications using LotusScript

## Prerequisites:

- Experience developing Notes applications at the same level attained upon completion of Application Development 2.
- Experience using a structured programming language.

## **Topics Covered:**

The course covers the following topics:

- LotusScript language fundamentals
- Notes Object Model
- Building conditions Using arrays
- · Accessing documents
- Accessing and manipulating field values
- · Accessing and manipulating current document data
- Synchronizing the front and back ends
- · Managing data flow

This course will not teach the following:

- · All of the Notes classes, methods and Properties
- · Programming fundamentals
- All of the syntax and constructs of LotusScript

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

# PGN2 - Advanced LotusScript in Notes

Course Code: PGN2

# **Duration: 2.0 Days**

**Summary Description:** 

The course focuses on advanced LotusScript programming techniques that allow acces to data both inside and outside of Notes, access to data on the World Wide Web, and manipulating data

inside a rich text field. Through lecture, demonstrations, and hands-on experience, participants will learn to add LotusScript language functionality to enhance application functionality.

Participants will build a Notes application that interacts with non-Notes databases, and pulls in information from the World Wide Web.

## Audience:

The target audience is:

- Notes R4 application developers who have experience developing, deploying, and debugging a Notes application
- Notes R4 application developers who have experience using LotusScript in Notes

## Prerequisites:

- Completion of Lotus Notes R4 Application Development 1 and 2, or equivalent skills
- · Completion of Introduction to LotusScript in Notes, or equivalent skills
- A minimum of four (4) months programming experience in structured object-oriented programming languages.

#### **Topics Covered:**

The course covers the following topics:

- Reading and writing data to external database systems
- · Accessing information from the World Wide Web
- Reporting on multiple databases
- · Creating a search agent
- Creating newsletter in different formats
- · Working with embedded objects

# **Course Delivery:**

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

# SA210 - Implementing a Domino Infrastructure

Course Code: SA210

**Duration: 3.0 Days** 

#### Overview:

Following a prescribed rollout plan, students will install and setup one or more Domino servers in a scalable fashion, including necessary topologies, Notes client setup, and browser client configuration.

## Audience:

Administrators new to Domino who will be responsible for initial install and setup of Domino 5.0 servers

# Prerequisites:

## Either:

Senior level system administration experience, and is new to Domino R5, and; Already attended the following Domino R5 end user courses:

- Introducing the Notes Client
- Extending the Notes Client,

and;

Strongly recommend attending the Maintaining Domino Users (SA330) course

**Or:** Mid level administrative experience, and some experience with Domino R5, and; Already attended the following Domino R5 end user course: Moving to Notes Mail, and; Strongly recommend attending the Maintaining Domino Users (SA330) course

## **Topics Covered:**

The course covers the following topics:

- Installing, setting up, and configuring a Domino Intranet
- Creating internal users and setting up internal office and mobile clients
- · Performing basic general and messaging server setup tasks
- Enabling Internet access to a Domino server

#### Course Delivery:

This course is structured in a lecture/lab format.

## SA260 - Deploying Domino Applications

Course Code: SA260

Duration: 2.0 Days

## **Summary Description:**

Students will deploy Domino applications in an existing infrastructure according to user needs and application requirements described in the scenario company (Worldwide Corporation) infrastructure plan.

#### Audience

Administrators new to Domino who will be responsible for deployment of Domino 5.0 applications.

## Prerequisites:

Implementing a Domino Infrastructure course

## **Topics Covered:**

The course covers the following topics:

- · Identifying user and application requirements
- Setting up database access
- Organizing databases
- Determining database backup strategy
- Rolling out databases to servers
- Rolling out databases to users
- Identifying deployment problems
- Solving deployment problems

## Course Delivery:

This course is structured in an Instructor-led. Classroom format.

## SA310 - Maintaining a Domino Server Infrastructure

Course Code: SA310 Duration: 4.0 Days

#### Overview:

In a pre-configured R5 server environment, students will perform basic server maintenance and troubleshooting tasks, and discover basic concepts about Domino administration.

#### Audience:

New Domino administrators responsible for maintaining existing Domino R5 servers.

## Prerequisites:

- 6 or more months experience as a System Administrator in networks and/or operating systems. Database and messaging administration experience is recommended (e.g., SMTP)
- Attended Maintaining Domino Users (SA330).

# **Topics Covered:**

The course covers the following topics:

- Using the Domino Administrator
- Assessing the current server infrastructure
- Monitoring and maintaining servers
- Monitoring and maintaining databases
- Monitoring and maintaining mail delivery
- Monitoring and maintaining Calendaring and Scheduling
- Monitoring and maintaining web servers
- Updating web servers, databases, and servers
- Adding clusters and partitions

This course is structured in a lecture/lab format.

## SA330 - Maintaining Domino Users

Course Code: SA330 Duration: 1.0 Day

#### Overview:

Using a pre-installed Domino R5 infrastructure, students will create and modify user settings and connections for both Notes Clients and browser clients. As part of this process, students will create and distribute Notes IDs, and recertify, rename, and terminate users.

#### Audience:

New Domino 5.0 users responsible for maintaining users of Domino R5.

## Prerequisites:

A basic understanding of network technologies, industry standard protocols (e.g., TCP/IP), and concepts.

For students with prior e-mail experience, perform the following tasks:

- Review Notes Client Guided Tour (provided with 5.0 Notes Client)
- Attend Moving to Notes Mail (End User course)

For students with no prior e-mail experience, attend the following End User courses, in addition to the above prerequisites:

- Introducing the Notes Client
- Extending the Notes Client
- Help Desk Support for Notes R5

#### **Topics Covered:**

The course covers the following topics:

- Introduction to Domino Administration
- · Registering Notes Users
- Configuring Notes Users
- Configuring non-Notes Users
- Updating Users
- Updating Groups
- Updating Software
- Responding to Common User Problems

#### Course Delivery:

This course is structured in a lecture/lab format.

Course Code: SA410

**Duration: 1 Day** 

## Overview:

Students learn various tools and approaches to improve Domino performance. Performance issues and tools are discussed for Domino and the various operating system platforms for Domino.

This course is designed for two delivery formats:

Seminar: 1 day

• Sample performance situations are presented to illustrate the topics.

## Workshop: 2 day

- Students work in groups to analyze and address performance problems using workload simulations (NT only).
- Performance references and platform-specific guidelines are provided with the materials.

#### Audience:

Experienced Domino administrators responsible for improving performance on existing Domino R5 servers.

## Prerequisites:

- An understanding of basic hardware and operating system issues
- An understanding of basic networking concepts
- A minimum of 6 months Domino R5 system administration experience
- Attended one of the following sets of Domino R5 system administration courses:

New R5 System Administrators:

- · Implementing a Domino Infrastructure
- Maintaining Domino Users, and Maintaining A Domino Infrastructure

Upgrading R4 to R5 System Administrators:

- Domino System Administration Update
- Transitioning a Domino Infrastructure to R5

#### **Topics Covered:**

- Performance Tuning Methods and Tools
- Improving CPU and Memory Performance
- Improving Domino I/O Performance
- Improving Network Performance
- Tuning Domino Attributes for Memory
- Optimizing Domino Mail Delivery
- · Optimizing Database Utilization
- Improving Cluster Performance (optional)

## Course Delivery:

This course is structured in a lecture/lab format.

SA410 - Performance Tuning a Domino Infrastructure

SA470 - Transitioning a Domino Infrastructure to R5

Course Code: SA470

**Duration: 2 Days** 

#### Overview:

This intensive course will provide students with the skills necessary to plan, test and implement a transition from Domino 4.5 to R5, including coexistence issues and strategies..

#### Audience:

Experienced Domino 4.5/4.6 System Administrators, Network Support Personnel, Consultants, and IT Managers responsible for migrating a Domino 4.5/4.6 deployment to release R5

## Prerequisites:

Experience in administering a Domino R4.5/4.6 network Attendance at the Domino System Administration Update workshop, or equivalent knowledge

## **Topics Covered:**

The course covers the following topics:

- Planning the transition through the test, pilot, and production rollout phases
- Performing the recommended upgrade sequence for servers in multi-server environments
- Describing and performing an upgrade of Notes mail files, and clients.
- Managing coexistence in different areas, including mail routing and database access.
- Upgrading messaging to include SMTP routing and MIME storage.
- Describing and performing R5 infrastructure enhancements such as Transaction Logging and Directory Catalogs.

# **Course Delivery:**

This course is structured in a lecture/lab format.

## ST730 - Administering a Sametime 3.0 Infrastructure

Course Code: ST730

Duration: 2.0 Days

#### Overview:

This course covers the installation and administration of the Sametime 3.0 server in Lotus Domino/Notes and Web-only environments.

#### Audience:

Experienced LAN system administrators who wish to install and maintain a Sametime 3.0 server in a Lotus Domino/Notes or Web-only environment.

#### Prerequisites:

The prerequisites for this course include:

- · Knowledge of Sametime 3.0 end-user functions.
- Experience installing and configuring workstation network hardware and software.
- Knowledge of operating system commands and graphical windowed environments.
- General knowledge of network protocol operation.

## Objectives:

Through lecture, demonstration and hands-on exercises, students will gain experience in:

- installing Sametime servers in these environments
- Using the Web-based Sametime Administration Tool to perform basic administrative tasks, such as managing users and groups, managing Sametime services, managing Domino and LDAP directories, monitoring and logging the server and using basic security.
- Introduction to the new features of the Sametime 3.0 server, including Multimedia services.

# **Topics Covered:**

The course covers the following topics:

- Installation of Sametime server in Lotus Domino environment
- · Installation of Sametime server in Web-only environment
- Managing users in a Sametime community
- · Administration of the Sametime 3.0 server
- · Sametime 3.0 server security
- · Configuring the services of the Sametime 3.0 server
- Configuring the integration of Sametime servers and LDAP directories

#### Course Delivery:

This course is structured in a lecture/lab format.

## ST550 - Developing Web Applications for Lotus Sametime 3

Course Code: ST550

Duration: 2.0 Days

#### Overview:

This course combines instructor lecture and demonstration with hands-on exercises and activities to teach Web application developers how to customize and develop real-time collaborative applications with Lotus Sametime.

#### Audience:

The target audience for Developing Web Applications for Lotus Sametime 3.0 is Web Application Developers who have experience using Java and HTML and who will be integrating Sametime functionality into their Web Applications using the Sametime 3 Java Toolkit.

### Prerequisites:

The prerequisites for this course include:

- Experience developing Web applications
- Experience writing Java code and/or JavaScript

## Objectives:

By the end of this course, the student should be able to:

- Defining Sametime features that can be added to existing web applications to enable collaboration
- Installing the Sametime connect client
- · Installing the Sametime Java client toolkit
- · Using the Sametime API
- Writing Java applets
- Creating a Sametime session
- Verifying secure logins
- · Adding users to an awareness list
- Enabling chat sessions
- Creating separate user sections
- · Creating a buddy list
- · Monitoring Sametime storage services
- Associating attributes with application users
- · Adding broadcasting
- Adding application sharing
- Adding the whiteboard
- Deploying a Sametime application

## Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course.

# LW400 -Developing Applications Using Lotus Workflow 3

Course Code: LW400 Duration: 2.0 Days

## Overview:

This course provides ideas and hands-on activities that will enable both Domino Application Developers and Process Analysts/Designers to design and create workflow applications using the out-of-the-box functionality of Lotus Workflow 3.0. This course does address the Lotus Workflow LotusScript API and events, but only at a very basic level; there are no programming exercises.

#### Audience:

This course is appropriate for Domino Application Developers and Process Analysts & Designers who are evaluating how Lotus Workflow could be used in their organization as well as new Lotus Workflow customers.

## Prerequisites:

The prerequisites for this course include:

 Knowledge of the business processes used in companies. This course will give ideas for determining how to implement those business processes in Lotus Workflow. Experience using the UI of the Domino R5 client.

## Objectives:

By the end of this course, the student should be able to:

- Design and create workflow applications using the out-of-the-box functionality of Lotus Workflow 3.0.
- Understand the Lotus Workflow LotusScript API and events at a very basic level

## **Topics Covered:**

- The benefits of using Lotus Workflow instead of native Notes for workflow application development
- · Guidelines for process design
- · Installing and configuring the required Lotus
- · Workflow databases
- · Designing and activating processes in the Lotus Workflow Architect
- Creating reports
- Using parallel routing, subprocesses and parent-child processes
- Testing workflow applications in Notes and on the Web
- Using the Notes and Web Viewers
- Using Sametime in the Web Viewer to handle exceptions
- Configuring the Audit Trail database for use in analyzing and improving processes
- · Setting up the Archive database
- Customizing the Web user interface (skins)
- Customizing Lotus Workflow functionality

#### Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course.

## DD710 - Domino.Doc System Administration 3.0

Course Code: DD710 Duration: 2.0 Days

#### Overview:

An essential course for Domino.Doc administrators who are responsible for planning, installing, and maintaining Domino.Doc.

## Audience:

Administrators with previous Domino administration experience whose organizations have recently purchased and/or installed Domino.Doc

#### Prerequisites:

The prerequisites for this course include:

- Completion of Notes 4.6 System Administration 1 or
- Implementing a Domino R5 Infrastructure and Maintaining Domino R5 Servers and Users courses or have the equivalent knowledge, skills and experience
- Working knowledge of at least one network operating system

## Objectives:

- By the end of this course, the student should be able to:
- Describe the Domino.Doc 3.0 features and architecture
- Plan for installation of a Domino.Doc 3.0 environment
- Install Domino.Doc server software
- Perform post-installation and post-library creation tasks
- Build a storage hierarchy
- Configure Domino.Doc using binder types and document types
- Create, manage, and troubleshoot Domino.Doc replicas
- Modify and Move a file cabinet
- Implement and customize a document life cycle
- Add an ODMA application to Domino.Doc
- Install the Domino.Doc Desktop Enabler and Desktop Enabler Plus clients
- Explore a Domino Doc library using the Windows Explorer Interface
- Define macro-enabled and support applications
- Maintain and Performance tune a Domino.Doc environment
- Integrate form action for capturing Notes documents into Domino.Doc

## Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course.

# QP700 - Administering QuickPlace 3.0

Course Code: QP700 Duration: 2.0 Days

## Overview:

This course provides an introduction to QuickPlace and instructions and practice on installing, configuring and managing a basic Lotus QuickPlace intranet environment. In this course, students will deploy a QuickPlace Server environment and perform basic administration tasks using multiple QuickPlace servers to manage users and content

## Audience:

System Administrators (Business Partners) who are new to QuickPlace. System Administrators (Business Partners) who are new to QuickPlace.

## Prerequisites:

The prerequisites for this course include:

- Familiarity with Domino Specifically: Domino Administrator client Domino Directory
- Web servers and protocols
- LDAP XML concepts
- Familiarity with Domino, specifically: Domino Administrator client Domino Directory

## Topics:

- QuickPlace Overview, including:
- Architecture Features Administration tasks
- QuickPlace user roles
- Deployment planning guidelines
- Creating a place Installing QuickPlace, including:
- Install scenarios
- Installing QuickPlace
- Starting and stopping the QuickPlace server Configuring QuickPlace, including:
- Setting up Directory access to QuickPlace
- Configuring QuickPlace to use the Place Catalog and SearchPlace features
- Setting up logging
- Configuring single-session sign-on Setting up QuickPlace Security, including:
- Creating authentication model Identifying access levels
- Changing administration passwords Creating a super user

## Course Delivery:

This course is structured in a lecture/lab format.

QP400 - Building Instant Collaborative Applications Using IBM Lotus QuickPlace 3.0

Course Code: QP400

**Duration: 2.0 Days** 

#### Overview:

This course introduces students to QuickPlace and how to use it to create a web-based, collaborative application. The course presents considerations for building collaborative applications and how QuickPlace allows developers to incorporate these considerations instantly.

#### Audience:

Domino application developers who are new to QuickPlace and wish to use QuickPlace to create and customize team collaborative applications

# Prerequisites:

The prerequisites for this course include:

- Familiarity with HTML and JavaScript
- Ability to create LotusScript or Java agents that use the Domino Objects.
- Domino Designer R5 Fundamentals and Domino Application Architecture and either
- Using LotusScript in Domino R5 Applications -or- Using Java in Domino R5 Applications

## Topics:

By the end of this course, the student should be able to:

- The QuickPlace architecture
- Creating a QuickPlace
- Customizing a QuickPlace using Show/Hide options to hide unwanted features
- Customizing forms of a QuickPlace through the QuickPlace user interface
- Creating new forms with HTML and JavaScript
- Anatomy of a Theme
- Modifying an existing Theme
- Working with customizable skin components such as Sametime status, Room Map link, and Download File link
- Mapping the QuickPlace objects to the Domino Objects
- Examining a QuickPlace application through Notes and Domino Designer
- Automating functionality in a QuickPlace with PlaceBots
- Creating a Java PlaceBot
- Creating a LotusScript PlaceBot
- Using XML to access the QuickPlace API
- Creating a PlaceType
- Using new PlaceType options to lock the sidebar or hide the members page derived places

- Controlling the design and content of a child QuickPlace by refreshing it with updates from the PlaceType
- Using central refresh of all Places that are based on a given PlaceType
- Disabling the refresh option for a child Place
- Adding a PlaceType to a QuickPlace server

## Course Delivery:

This course is structured in a lecture/lab format.

# KS300 - Implementing a Lotus Discovery Server 1.0

Course Code: KS300 Duration: 2.0 Days

#### Overview:

This course covers installation, configuration and maintenance of Lotus Discovery Servers.

#### Audience:

Domino R5 administrators responsible for installing, configuring and maintaining a Discovery Server environment.

### Prerequisites:

The prerequisites for this course include:

- Basic knowledge of HTTP and TCP/IP protocols
- Familiarity with Microsoft IE 5.01 (or higher)
- Working knowledge of Windows NT operating system
- Domino 5.x Administration experience (installing, configuring and maintaining an R5 server
- (Optional) Sametime administration experience.

#### Objectives:

By the end of this course, the student should be able to:

- Understand what a Discovery Server is
- Install a Discovery Server
- Configure Information Sources
- Build and Refine the K-map
- Configure Affinities and Metrics
- Plan a Knowledge Discovery System

This course is structured in a lecture/lab format.

#### DD420 - Domino.Doc Customization and the API

Course Code: DD420 Duration: 3.0 Days

#### Overview:

This course will teach experienced Notes developers, customization options, methods and strategies for Domino.Doc 3.0, encompassing simple, extended and advanced techniques using the API.

The program will consist of lecture, demonstration, and presentation sessions, as well as extensive hands-on sessions dealing with customization techniques and methodologies applicable to the UI, document life cycle, document interchange, integration of third-party applications and ODMA compliant applications.

#### Audience:

Applications developers who will be customizing Domino.Doc. Developers will have previous Notes development experience. Developers may work directly for an enterprise as a development

resource, or for a Domino Doc Specialty Business partner as a consultant who customizes Domino Doc.

Developers will have previous experience using LotusScript to an advanced level, and may have experience using Visual Basic, Visual Basic for Applications and C++.

# Prerequisites:

The prerequisites for this course include:

- Notes System Administration 1 (R4.6) or Implementing a Domino Infrastructure (R5)
- Notes Application Development 1 (R4.6) or Domino Designer Fundamentals (R5)
- Minimum 6 months LotusScript experience, and LotusScript (R4.6) or
- Creating Agents using LotusScript (R5)
- Domino.Doc End-User 3.0 or equivalent.
- Additional beneficial skills: Visual Basic / Visual Basic for Applications C++

#### Objectives:

By the end of this course, the student should be able to:

## Domino.Doc Architecture

- Access Groups and Responsibilities
- Storage Metaphor
- Security Features
- Customization Features

## **Basic Customization**

- Document Types
- Binder Types

- Custom View of Binders
- Custom Views within Binders
- Global Profiles

## **Extended Customization**

- The DocDocument Object Class
- DocDocument Events
- DocDocument Properties & Methods
- Administration Events

## Advanced Customization Using the API

- API Object Model
- Connection Protocols
- High-level Classes
- Object Collections
- Profiles and Security Objects
- Creating Documents
- Retrieving Documents
- Updating and Deleting Documents
- Creating Binders
- Security and Exception Handling

## Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course.

## **Lotus Sales 101**

Course Code: None Duration: Self study

#### Overview:

The Lotus Software Sales 101 course provides a valuable opportunity for Business Partner Sales Professionals to gain inside knowledge on the Lotus Software portfolio of products including: Lotus Notes and Domino, iNotes, Mobile Notes, Sametime, QuickPlace, Domino.Doc, Workflow, Discovery Server and LearningSpace.

#### Audience:

Active Business Partners in PartnerWorld for Software.

## Prerequisites:

There are no prerequisites for this course:

## Objectives:

The Lotus Software Sales 101 is the first layer of sales education in the Lotus Power Brand Sales Roadmap for IBM Business Partners. It introduces the products at a high level, discusses strategy and implementation, how they work together, how to beat the competition and, most importantly, how you can make more money by leveraging the strength of IBM.

The course materials are downloadable from the PartnerWorld for Software Business Partner Zone. Under Education and Certification and Sales Education.

#### **Lotus Sales 201**

Course Code: None Duration: 1.0 Days

#### Overview:

The Lotus Sales 201 course is designed for PWSW Business Partner Sales professionals who are interested in cultivating a solutions-oriented approach to selling the Lotus software portfolio of offerings.

#### Audience:

Business Partners who meet the following requirements prior to attending this workshop.

- Your firm must be an active Business Partner in PartnerWorld for Software.
- Your firm must also have one or more certifications from these product areas:
  - a) Notes/Domino R5 Application Development
  - b) Domino R5 System Administration
  - c) Advanced Collaboration System Administration
  - d) Advanced Collaboration Application Development

## Prerequisites:

The required prerequisites are the Lotus Sales 101 workshop.

#### Objectives:

By the end of this course, the student should be able to recognize a qualified Lotus opportunity, develop a solution with the customer and quickly close the sale.

## Course Delivery:

This course is structured in a classroom format. Workshop materials as well as the student workbook are downloadable from the PartnerWorld for Software Business Partner Zone (Education and Certification/Sales Education), and should be brought by the student to the class.

#### Lotus R5 to R6 Recertification ND420

Course Code: ND420
Duration: 3 Days

# Overview:

This 3-day, instructor-led course provides students with hands-on practice using several of the new features and enhancements for IBM Lotus Domino Designer 6.

#### Audience:

Application developers who have experience developing Release 5 applications for Notes and the Web. An additional audience is Release 4 developers who have taken ND410 to become familiar with the Domino Designer 6 user interface and basic functionality.

## Prerequisites:

**For Release 4 developers only**: Preparing IBM Lotus Domino Release 4 Developers to Use IBM Lotus Domino Designer 6 (ND410) 1-day, instructor-led, generally scheduled to immediately precede ND420. Experience creating Release 5 applications for Notes and the Web. Experience coding in Java and JavaScript, or LotusScript is recommended.

#### Contents:

- · enhanced event model
- Locking design elements
- · Embedded editor
- Embedded scheduler
- Using the Agent Properties to create and set security for agents
- New action features
- New LotusScript classes for XML
- Data connection resources
- Formula language enhancements (including looping)
- Calling Java programs from LotusScript (LS2J)
- Using folders and bookmarks to organize complex applications
- Using layers and style sheets to enhance presentation of content on the Web
- Enhanced HTML editing capabilities
- Programmatically setting column colors
- Using formulas to hide columns
- Using a background image in a view
- Creating customized design reports

#### Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course.

Lotus R5 to R6 Recertification ND720

Course Code: ND720

**Duration: 2 Days** 

## Overview:

This course introduces students to the new administration features in Notes/Domino 6 to aid in planning their upgrade. This course covers features as contained in an early Domino/Notes 6 build.

#### Audience:

Experienced Domino Release 5 administrators requiring early exposure to new Domino/Notes 6 features that impact system administration who will be responsible for upgrading the Domino infrastructure to Domino/Notes 6.

## Prerequisites:

Completion of the following Release 5 courses or equivalent knowledge, skills, and experience: Maintaining Domino Users Maintaining a Domino Server Infrastructure; and Implementing a Domino Infrastructure

Recommended completion of the Deploying Domino Applications course or equivalent knowledge, skills, and experience.

-Or-

Completion of the following course: Moving from IBM Lotus Domino Release 4 Administration to IBM Lotus Domino 6

#### Contents:

- Installing Domino and Notes 6
- · Setting up a Domino 6 Server
- Setting up a Centralized Directory Topology
- Administration Requests Selecting an Administration Server Configuring the Notes 6 Client

#### **Setting up the Administration Environment**

- Setting Administration Access
- Using the Domino Web Administrator
- Using the Domino Console
- Issuing Command in the Domino Console

# **Securing the Domino Environment**

- Server-Based Certificate Authority
- Internet Certificates
- Notes Certificates
- · Migrating an Certifier

- Registering Users with the CA Process Certifiers with Passwords Internet Certificate Authority
- Implementing Extended ACL (xACL)

## **Managing Notes Users**

- · Policy-Based Management
- · Creating an Organizational Policy
- Security Settings in Policies
- Synchronizing Notes and Internet Passwords
- Policy Precedence
- Determining a User's Effective Policy
- Configuring Shared Clients
- · Finding Instances of a Shared Name
- Migration Tools
- Upgrading Clients with IBM Lotus Notes Smart Upgrade

## Managing Web Users and Files

- · Using the Internet Sites
- · View Web Site Rules
- Enabling Single Sign-On
- Enabling WebDAV

## **Managing Domino Messaging and Directories**

- Mail Controls
- Setting Mail Quota Restrictions
- Mail Journaling
- Enabling Mail Journaling
- Mail Rules
- · Creating a Mail Rule
- Activating a Rule LDAP Enhancements

## Monitoring the Server Environment

- Monitoring Server Performance with Statistics
- Charting Activity Logging
- Enabling Activity Logging
- Determining Usage with Activity Analysis

## Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course.

# TM120 - Tivoli Enterprise Console V3.8

Course Code: WW TM08G, US TM120

**Duration: 4 Days** 

#### Overview:

Gain hands-on training for the IBM Tivoli Enterprise Console (TEC). Learn about product capabilities and benefits, architecture and terminology, configuring the event consoles for viewing events, defining new events, modifying the logfile adapter to generate events from an American National Standard Code for Information Interchange (ASCII) file, creating new rules using the graphical Rule Builder, and using IBM Tivoli NetView for Windows

#### Audience:

System and network administrators responsible for monitoring system activity from the TEC event consoles, or creating and maintaining rules created with the Graphical Rule Builder.

## **Prerequisites**

Tivoli Management Framework 3.7

## Objectives:

After completing this course, you should be able to:

- Explain the capabilities, benefits, and architecture of TEC
- Discuss the architecture and working of Availability Intermediate Manager Configure event consoles for viewing events
- Define new events using Basic Recorder of Objects in C (BAROC)
- Modify the Logfile Adapter to generate events from an ASCII file
- Create new rules using the Graphical Rule Builder

# Course Delivery:

This course has Lecture, hands-on and written exercises

TM150 - Tivoli Management Framework 3.7

Course Code: WW TM15G, US TM150

**Duration: 3 Days** 

#### Overview:

Learn the fundamentals of Tivoli Framework, the foundation of most Tivoli Enterprise products. Knowledge of Framework terms, resources, and concepts is an important first step in your preparation for success with Tivoli Enterprise products. Master several key skills needed to perform day-to-day

administrative functions. Learn new terminology and concepts associated with administering a Tivoli Framework installation. Practice concepts by performing lab exercises.

This is an introductory course that assumes little or no Framework experience. Learn the Tivoli Framework fundamentals in preparation for Tivoli product courses that are dependent upon the Framework infrastructure and more advanced Framework courses.

#### Audience:

System administrators and implementers unfamiliar with Tivoli Framework.

#### **Prerequisites**

- Familiarity with network concepts, especially Transmission Control Protocol / Internet Protocol (TCP/IP)
- Working knowledge of systems administration concepts for UNIX (preferably Solaris 2.x, AIX, or HP-UX) and Windows NT
- Working knowledge in windowing software operation on UNIX (Openlook, Motif, and Common Desktop Environment (CDE)) and Microsoft (MS) Windows 95 or NT 3.5 or 4.0
- Knowledge of basic UNIX shell commands is strongly recommended.

## Objectives:

After completing this course, you should be able to:

- Describe the Tivoli Enterprise environment and the applications that use the Tivoli architecture
- Operate and navigate within the Tivoli desktop
- Define Tivoli authorization and authentication through Tivoli administrators, roles, and policy regions
- Create and distribute Tivoli profiles and profile managers
- Create and execute Tivoli tasks and jobs, and use the Tivoli scheduler
- Define the different types of Tivoli policies
- Create and configure management gateways and Tivoli Management Agents (TMA)
- Explain the installation process for Tivoli Framework software

#### Contents

- Introduction to Tivoli
- Framework overview
- Tivoli resources
- Tivoli authorization and authentication
- Tivoli management agents
- Profiles and profile managers
- Policy overview

- Tivoli database and Relational Database Management System (RDBMS) Interface Module (RIM) database
- Interconnecting Tivoli Management Regions (TMR)
- Command line interface for Framework
- Introduction to installation

This course has Lecture, hands-on and written exercises

## TM210 - Programming Rules for Enterprise Console

Course Code: WW TM28G, US TM210

**Duration: 2 Days** 

#### Overview:

IBM Tivoli Enterprise Console (TEC) is a powerful event management tool. Learn introductory TEC rule writing using the TEC rules language. Learn to program custom rules to respond to events, correlate multiple events, automate system administration tasks, and read rule trace and profiling output to verify and troubleshoot rules. Explore the important concepts behind TEC rules programming, focusing on hands-on rule programming. Reinforce important concepts with a series of exercises that are based on a number of real-life event management scenarios.

## Audience:

System administrators and programmers who program and maintain TEC rules

## **Perquisites**

You should complete:

Tivoli Management Framework TM15G or TM150

#### Objectives:

- Create and manipulate rule bases
- Create and modify event classes using the Basic Recorder of Objects in C (BAROC) language
- Write plain rules
- Write and interpret rules with event specifiers
- Write rules using the Reverse and Undo Operation (REDO) concept

- Write change rules
- Write timer rules
- Write simple rules
- Write correlation rules
- Read and analyze trace output generated by various rules and actions
- Profile rules and interpret profiling reports
- Use TEC templates
- Optimize rules by changing the default order of execution
- Understand the impact of the BAROC event class hierarchy on rule performance

#### Contents

- Overview Review of the TEC architecture
- Command Line Interface (CLI) commands
- BAROC review
- Introduction to rules
- Event specifiers
- Change and timer rules
- Simple and correlation rules
- Optimizing rule execution

## Course Delivery:

This course has Lecture, hands-on and written exercises

## TM250 - Tivoli Management Framework 3.7 for Senior Administrators

Course Code: WW TM25G, US TM250

**Duration: 4 Davs** 

#### Overview:

Tivoli Management Framework is the nucleus of the Tivoli Management Environment (TME). Its exceptional architecture provides unequaled systems management control and organization capabilities. Expand your Tivoli Management Framework skills beyond the level covered in the prerequisites. Learn operational factors and considerations that help you make decisions about design and implementation. Also, learn about interconnection between Tivoli Management Regions (TMR), maintaining the Tivoli object database, and troubleshooting techniques. Practice your skills in hands-on labs.

## Audience:

Senior system administrators, implementers, Tivoli engineers, and support individuals, who need advanced knowledge and troubleshooting expertise in Tivoli Framework and Tivoli applications.

# **Prerequisites**

You should complete:

Tivoli Management Framework (TM150) or have equivalent knowledge.

The following skills and areas of knowledge are also required:

- Senior system administrator knowledge level on UNIX servers and NT Server (3.51 or 4.0 server)
- Knowledge of windowing software operation on UNIX X-windows including:
  - Openlook
  - Motif
  - Common Desktop Environment (CDE)
  - Microsoft (MS) Windows 95, NT 3.5 and 4.0
- Understanding of networking terms and concepts.
- Basic operations and understanding of TME, including the use of:
  - Tivoli security roles
  - Desktop
  - Tasks
  - Jobs and scheduler
  - Policy regions
  - Tivoli profile manager
  - Profile and how it relates to Tivoli applications

# Objectives:

After completing this course, you should be able to:

- Design an efficient TME
- Describe the internal workings, deployment considerations, configuration and troubleshooting techniques of a Tivoli Management Agent (TMA)
- Configure an interconnection between TMRs to allow them to exchange resources
- Design and deploy Tivoli with Multiplexed Distribution (Mdist)
- Identify techniques for troubleshooting MDist problems
- Describe the Tivoli Relational Database Management System Interface Module (RIM) object, its configuration, and internal operations
- Identify the tasks needed to maintain a Tivoli object database, including its maintenance, scheduling, and backup and restore procedures
- Explain the internal design of Tivoli as an object system, including the background of the Tivoli Framework as a Common Object Request Broker Architecture (CORBA) compliant client/server architecture
- Use techniques for troubleshooting problems between the Tivoli Management Framework and other Tivoli applications

#### Contents

- Planning and design of the TME
- Installation and removal of Tivoli enterprise server software

- Installation of Tivoli applications using Software Installation Service (SIS)
- Tivoli framework policy
- Tivoli management agent: architecture and deployment issues
- TMR interconnections
- MDist issues and troubleshooting
- RIM issues and troubleshooting
- Maintaining the object database
- Troubleshooting the Tivoli object repository

## Course Delivery:

This course has Lecture, hands-on and written exercises

# TR170 - Tivoli SecureWay User Administration 3.7

Course Code: TR170

Duration: 2 Days

# Overview:

Tivoli SecureWay User Administration (TSUA) is a powerful tool to manage user accounts and account attributes across heterogeneous distributed systems. Develop skills to perform comprehensive user administration functions across a Tivoli Management Environment (TME).

#### Audience:

System administrators managing large numbers of users and group records.

# Prerequisites:

You should complete:

 Tivoli Management Framework 3.7 (TM150) or have equivalent experience with TME and the installation and upgrading of Tivoli products. You should also have working knowledge of shell scripting.

## Objectives:

After completing this course, you should be able to:

- Identify TSUA features
- Install and configure TSUA
- Identify TSUA considerations for Lightweight Directory Access Protocol (LDAP)
- Identify TSUA considerations for Network Information Service (NIS)
- Customize TSUA
- Maintain a TSUA installation

#### Contents

- Identifying TSUA features
- Installing and configuring TSUA
- Identifying TSUA considerations for LDAP

- Identifying TSUA considerations for NIS
- Customizing TSUA
- Maintaining a TSUA installation

Course Code: TR120

Duration: 4 Days

#### Overview:

Tivoli SecureWay Security Manager product is a powerful role-based application that greatly facilitates managing access to enterprise resources. Learn to translate the security policies established by the client into automated processes supported by Tivoli SecureWay Security Manager. Through hands-on exercises, you install, configure, and integrate Tivoli SecureWay Security Manager into an existing Tivoli Management Region (TMR) policy region. Also, practice interpreting and implementing security policies.

## Audience:

Tivoli Services consultants, post-sales engineers, deployment engineers, and IBM Business Partner consultants.

## Prerequisites:

You should complete:

- Tivoli Management Framework 3.7 (TM150)
- Tivoli SecureWay User Administration 3.7 (TR170)
- Tivoli SecureWay Policy Director 3.7 Fundamentals (TR300)
- or have equivalent experience.

## Objectives:

After completing this course, you should be able to:

- Install, setup, configure, and troubleshoot Tivoli SecureWay Security Manager
- Integrate Tivoli SecureWay Security Manager with Tivoli User Administration
- Translate a given security policy into Tivoli SecureWay Security Manager profile configurations
- Describe migration methods from Tivoli Access Control Facility (TACF) to Policy Director for Operating Systems (PDOS)
- Describe differences between TACF and PDOS

#### Contents

- Tivoli SecureWay Security Manager 3.7.1 Unix Implementation Overview
- Tivoli SecureWay Security Manager 3.7.1 Installation and Integration
- PDOS Implementation
- Tivoli SecureWay Security Manager NT Security Implementation
- Security System Protection Configuration

- Security Policy Translation
- TACF to PDOS Migration
- PDOS Troubleshooting

## Course Delivery:

This course has Lecture, hands-on and written exercises

## TM090 - Tivoli Enterprise Console 3.7

Course Code: TM090 Duration: 3 Days

## Overview:

Tivoli Enterprise Console (TEC) is a powerful enterprise-wide event monitoring and event correlation tool. Learn important concepts about the theory of operation of the TEC components, their relationships to one another and their relationship to the TEC 3.7 operating environment. Develop skills used in installing, configuring, programming and operating the TEC product and its numerous components with a series of hands-on labs.

#### Audience:

Tivoli administrators responsible for creating, configuring, and using the event console, and those individuals responsible for programming the Rules engine.

## Prerequisites:

You should complete:

Tivoli Management Framework 3.7 (TM150) or have equivalent experience.
 Experience with text editors is also required.

## Objectives:

After completing this course, you should be able to:

- Identify the components of TEC 3.7 and describe their functional operation
- Authorize administrators to view and modify events
- Install, customize, and use the event console display
- Identify and configure event adapters
- Define new event classes using Basic Recorder of Objects in C (BAROC)
- Create and maintain rule bases
- Create simple and compound rules
- Modify the logfile adapter to process customer defined events Identify typical processes used to troubleshoot problems within the TEC 3.7 environment

#### Contents

Tivoli Enterprise Console concepts

- Tivoli Enterprise Console foundations
- Event adapters
- Event management
- Using and customizing the event console
- Event definition
- Rules
- Rule builder examples
- Design considerations
- Logfile adapter

This course has Lecture, hands-on and written exercises

## TM145 - Tivoli Software Distribution Version 4.1

Course Code: TM145

**Duration: 3 Days** 

#### Overview:

Learn the skills necessary to set up and operate Tivoli Software Distribution Version 4.1. Gain an overview of Tivoli software distribution concepts and focus on how to prepare and distribute software.

Hands-on labs offer individuals the opportunity to practice the concepts and skills learned in class.

## Audience:

Experienced system administrators and support personnel who install and maintain software, and perform operations on Personal Computer (PC) and UNIX systems operating in a distributed enterprise.

#### Prerequisites:

You should complete:

Tivoli Management Framework 3.7 (TM150)
 or have equivalent operations experience and have the ability to populate an administrator's desktop, a working knowledge of policy region, and the ability to create profile managers.

#### Objectives:

After completing this course, you should be able to:

- Identify the main features of Tivoli Software Distribution 4.1
- Successfully plan for and install Software Distribution 4.1
- Create a software package using autopack
- Distribute a software package
- · Create and edit a software package using the software package editor

- List the features inventory and Tivoli Enterprise Console (TEC) add when integrated with software distribution
- Set up and use the Tivoli software distribution Web interface
- Troubleshoot software distribution
- Create and execute activity plans
- Use the change configuration management service
- Transferring files with the data moving service
- Manage mobile workstations

## Contents

- Introduction to Tivoli Software Distribution Planning for and Installing Tivoli Software Distribution
- Creating a Software Package Using the Software Package Editor
- Distribution of Software Packages
- Using AutoPack to create Software Packages
- Troubleshooting Software Distribution
- Transferring files with the Data Moving Service
- Change Configuration Management
- Using the Activity Planner
- Integration with other Tivoli Products: Inventory and TEC
- Tivoli Software Distribution Web Interface (previously UserLink)

# **Course Delivery:**

This course has Lecture, hands-on and written exercises

# TM180 - Tivoli Distributed Monitoring 3.6

Course Code: WW TM18G, US TM180

**Duration: 2 Days** 

## Overview:

Tivoli Distributed Monitoring is an efficient, reliable, automated tool that provides Information Technology (IT) administrators the capabilities to closely monitor the status and performance of mission-critical distributed applications and computing resources. Learn to configure, operate, customize, and troubleshoot Tivoli Distributed Monitoring. Practice your skills in a complex lab environment.

#### Audience:

System administrators who set up, configure, or use Tivoli Distributed Monitoring.

#### Prerequisites:

You should complete:

Tivoli Management Framework 3.7 (TM150) or have equivalent experience.

#### Objectives:

After completing this course, you should be able to:

- · Describe the components of Tivoli Distributed Monitoring
- · Distribute monitor profiles
- Configure, display, and interpret Tivoli monitors and Tivoli indicator collections

- Configure monitors to initiate Tivoli Enterprise Console (TEC) events
- Create and distribute, standard, custom and asynchronous monitoring profiles
- Use Tivoli manager for Windows NT to monitor NT systems
- Define and use proxy endpoints
- Use default source profiles
- Troubleshoot Tivoli Distributed Monitoring

#### Contents

- · Tivoli Distributed Monitoring overview
- Tivoli Distributed Monitoring profiles
- · Tivoli Distributed Monitoring functions
- · Custom monitors
- Tivoli Manager for Windows NT
- Data collection and reporting
- · Proxy objects
- Troubleshooting Tivoli Distributed Monitoring
- · Additional resources

## Course Delivery:

This course has Lecture, hands-on and written exercises

# TM200 - Tivoli Inventory 4.0

Course Code: TM200

**Duration: 2 Days** 

#### Overview:

Learn to administer and implement Tivoli Inventory and Scalable Collection Service. Learn to collect and store inventory data and to use queries provided by Tivoli to interrogate the database and display the information collected by Tivoli Inventory. Perform inventories of the hardware and software present in your enterprise environment. Also, learn to collect custom information, such as user-supplied information and Desktop Management Interface (DMI) information. Practice concepts by performing hands-on lab exercises.

#### Audience:

Tivoli administrators responsible for configuration and administration of the Tivoli Inventory application. Individuals responsible for using the results of the inventory data for monitoring physical inventory and software license accounting.

#### Prerequisites:

You should complete:

- Tivoli Management Framework 3.7 (TM150)
   or have equivalent operations experience. You should also have:
- Knowledge of basic inventory control and system configuration management concepts
- Knowledge of Relational Database Management System (RDBMS) and Structured Query Language (SQL) concepts (you do not need to be a Database Administrator (DBA))

Working knowledge of Management Information Base (MIB)

## Objectives:

After completing this course, you should be able to:

- Describe the basics of a Tivoli Inventory environment
- Gather hardware, software, and configuration information using Tivoli-provided inventory scanners
- View inventory data from the configuration repository
- · Manage when, where, and how inventory distributions and collections occur
- Gather custom system information
- Install and configure a Tivoli Inventory environment based on information requirements, network configuration, and Tivoli Management Environment (TME) configuration
- Implement Scalable Collection Service

#### Contents

- Overview of Tivoli Inventory
- Configuring inventory profiles
- Gathering hardware information
- Gathering software information
- Viewing Tivoli Inventory data
- · Managing distributions and collections
- Gathering custom information
- · Scalable Collection Service
- · Tivoli Inventory advanced topics

## Course Delivery:

This course has Lecture, hands-on and written exercises

# TR300 - Tivoli SecureWay Policy Director 3.7 Fundamentals

Course Code: TR300

**Duration: 1 Day** 

#### Overview:

Tivoli SecureWay Policy Director is a robust and secure policy management tool for e-business and distributed applications. It uniquely addresses the challenges of e-business security: escalating costs, growing complexity, and the inability to implement security policies across platforms. Learn about the Tivoli SecureWay Policy Director architecture, components, and functions. Reinforce classroom discussions with interactive quizzes and hands-on labs that demonstrate basic Policy Director features and functions.

## Audience:

System administrators and security specialists who need to understand the concepts and functions of Tivoli SecureWay Policy Director.

## Prerequisites:

You should have the following knowledge and skills:

- Networking terms and definitions
- Object-oriented design terms and definitions
- Client/server terms and definition
- Working knowledge of a browser (Internet Explorer or Netscape)

# Objectives:

After completing this course, you should be able to:

- Determine the components, architecture, and functionality of Tivoli SecureWay Policy Director
- Determine authentication and authorization mechanisms
- Administer users and groups
- Secure access to the resources of an organization

#### Contents

- Introduction to Tivoli SecureWay Policy Director
- Administering users and groups using the management console
- Using Policy Director Security Services
- Authentication support
- Access control using Tivoli SecureWay Policy Director
- Introducing junctions
- Uninstalling Tivoli SecureWay Policy Director

# Course Delivery:

This course has Lecture, hands-on and written exercises

## TR330 - Tivoli SecureWay Policy Director 3.7 System Administration

Course Code: TR330 (TR33C in Canada)

**Duration: 4 Days** 

## Overview

Tivoli SecureWay Policy Director (PD) is a robust and secure policy management tool for e-business and distributed applications. Learn about the capabilities and advanced configuration techniques of PD. Develop the knowledge and skills you need to set up PD in a multiplatform, multisystem environment by completing building block exercises.

## Audience:

System administrators responsible for the administration and configuration of PD components.

# Prerequisites:

You should complete:

- Tivoli SecureWay Policy Director 3.7 Fundamentals (TR300) and be familiar with PD concepts and features.
- You should also have basic system administrative skills for UNIX and Windows NT and know:
- Distributed Computing Environment (DCE) installation and administration
- Lightweight Directory Access Protocol (LDAP) installation
- Transmission Control Protocol / Internet Protocol (TCP/IP) fundamentals
- Networking concepts
- Firewall concepts

## Objectives:

After completing this course, you should be able to:

- Install and configure DCE, DB2, LDAP, IBM Hypertext Transfer Protocol (HTTP) Server, and PD components (ivmgr, ivbase, ivweb, ivnet, and ivtrap) in a realistic scenario involving multiple machines
- Install and configure an LDAP replica server and cover load balancing and fail-over scenarios
- Install and configure a DCE replica server and test failover scenarios
- Configure DCE for TCP-only communication
- Create PD users and groups
- Configure WebSEAL for forms-based authentication
- Customization of login forms for WebSEAL.
- Examine PD log files
- Create and install a Common Gateway Interface (CGI) program to dump PD headers on junctioned Web servers
- Create and modify Access Control Lists (ACL)
- Install and configure query contents on third-party Web servers
- Create WebSEAL junctions to third-party Web servers
- Install and configure NetSEAT client and test fail-over scenarios
- Configure NetSEAL to protect Telnet ports
- Create Global Sign-On (GSO) targets

#### Contents

- PD concepts and components
- Installing PD components
- LDAP as a user registry

- Introduction to DCE
- WebSEAL and NetSEAL
- GSO
- Accountability and auditing

This course has Lecture, hands-on and written exercises

## TR320 - Tivoli SecureWay Policy Director Architecture and Solution Design

Course Code: TR320
Duration: 4 Days

#### Overview:

Tivoli SecureWay Policy Director is designed to unite core security technologies around common security policies. This helps reduce implementation time and management complexity, thereby lowering the total cost of secure computing. Learn about Policy Director solution design based on an existing infrastructure and client expectations. Discuss how Policy Director integrates into an environment with existing authentication methods and existing Web servers and load balancing products. Learn the Distributed Computing Environment (DCE) cell design principles. Evaluate the pros and cons of DCE versus Lightweight Directory Access Protocol (LDAP) registries. Use the IBM LDAP Directory, learning concepts, capabilities, and tips on LDAP population, termination, and usage. Also, learn about integrating applications with Policy Director and SecureWay Public Key Infrastructure (PKI) integration. Apply the techniques presented in class to a detailed case study.

## Audience:

Senior network security consultants using Policy Director to implement enterprise security policy.

## Prerequisites:

You should be familiar with:

- Policy Director concepts and features
- Third-party web server fundamentals
- LDAP fundamentals
- · PKI fundamentals
- · Security policy management concepts
- Security communication protocols
- Firewall concepts
- Directory services fundamentals
- Basic Web page development fundamentals (including security issues)

## Objectives:

After completing this course, you should be able to:

- Specify the security policy of an organization
- Design DCE for Policy Director

- · Design directory servers for Policy Director
- Integrate Policy Director with the firewall architecture
- · Perform capacity planning
- Integrate applications with Policy Director
- · Design SecureWay PKI for Policy Director

## Contents

- · Policy Director concepts and overview
- Defining security policy
- DCE cell design
- LDAP design
- · Network topology design
- Capacity planning
- Application integration
- · SecureWay PKI integration
- Solution Architect Frequently Asked Questions (FAQ)
- Workshop

## Course Delivery:

This course has Lecture, hands-on and written exercises

# TR390 - Tivoli Access Manager for e-business 3.9 Systems Administration Implementation

Course Code: WW TW10G, US TR390

**Duration: 5 Days** 

#### Overview:

IBM Tivoli Access Manager for e-business 3.9 is a robust and secure policy management tool for e-business and distributed applications. Learn about the capabilities and advanced configuration techniques for Access Manager. Complete building block exercises in each unit to develop the skills you need to set up Access Manager for e-business in a multiplatform and multisystem environment.

#### Audience:

System administrators, Information Technology (IT) specialists, programmers, and IBM Business Partners who deploy IBM Tivoli Access Manager for e-business.

## Objectives:

Install and configure IBM Tivoli Access Manager for e-business components and supporting software in a multimachine scenario Create and assign access rights to IBM Tivoli Access Manager for e-business users and groups Install and configure WebSEAL to support various types of configurations and authentication, including Multiplexing Proxy

Agents (MPA) and Single Sign-On (SSO) Describe and configure delegated administration

#### Contents:

- Installing DB2, LDAP (and LDAP replica), IBM HTTP Server, and IBM Tivoli Access Manager for e-business components
- Load balancing Creating IBM Tivoli Access Manager for e-business users and groups using the Web Portal Manager and pdadmin
- Configuring WebSEAL
- Configuring delegated administration
- Creating and configuring Access Control Lists (ACL)
- Creating and configuring SSO targets Tivoli Policy Director 3.8 to IBM Tivoli Access Manager for e-business 3.9 migration

## Course Delivery:

This course has Lecture, hands-on and written exercises

## TS570 - Tivoli Storage Manager 5.1 Implementation

Course Code: WW TM50G or TS57G, US TS570

**Duration: 5 Days** 

## Overview:

Learn how to implement IBM Tivoli Storage Manager (TSM) across the enterprise. Learn to implement automatic policy-driven backup, restore, archive, and retrieval functions at both the IBM TSM server and client workstations. Also, develop skills using the IBM TSM administrative interfaces to allow them to manage the IBM TSM server, database, recovery log, storage pools, and client policies. During hands-on exercises, customize an IBM TSM system to automate client operations and protect IBM TSM and client data. The skills you learn in this course apply to all IBM TSM client and server platforms

#### Audience:

Consultants, architects, project managers, implementers, and Business Partners who perform hands-on implementation or administration of TSM 5.1

#### Prerequisites:

You should be familiar with NT or UNIX operating systems and have experience installing software on NT or UNIX.

#### Objectives:

After completing this course, you should be able to:

- Describe IBM TSM, its functions, and features
- Install, configure, and license IBM TSM software

- Use the administrative and client interfaces provided with IBM TSM, set up client and administrator registration and passwords, monitor the server, manage storage pools, and configure libraries
- Invoke the IBM TSM client, set up client options, backup and restore client files, and perform various other client functions
- Describe how IBM TSM uses policies to manage data, and to build, define, and implement policies based on a service level agreement
- Describe the IBM TSM scheduling modes available, set server and client schedule options, build client and server schedules, and manage the event log Identify messages that are candidates for central logging, describe event message processing, use reporting tools, and generate an IBM TSM database report
- Backup and recover the IBM TSM database and storage pools

## Contents:

- TSM overview
- Installation, packaging, and licensing
- TSM server administration
- Implementing client functions
- Policy management
- Central scheduler
- Event logging, reporting, and monitoring
- Database and storage pool backup and recovery

#### Course Delivery:

This course has Lecture, hands-on and written exercises

## TS580- Tivoli Storage Manager 5.1 Advanced Administration

Course Code: WW TM50G or TS58G, US TS580

**Duration: 4 Days** 

#### Overview:

This course provides in-depth administration training with IBM Tivoli Storage Manager Enterprise Edition beyond the IBM Tivoli Storage Manager Implementation class. You will learn to configure the Storage Manager database and recovery log for performance and availability. You will develop skills to run both client and server trace functions and to write and execute server scripts. You will be shown how to configure and administer Storage Manager's Enterprise Administration and Server to Server Virtual Volumes, as well as recover destroyed Storage Manager databases and volumes. You will also learn the recommended values for the more critical Tivoli Storage Manager performance tuning parameters.

#### Audience:

Consultants, architects, project managers, implementers, and Business Partners who perform hands-on implementation or administration of TSM 5.1

## Prerequisites:

You should complete:

Tivoli Storage Manager 5.1 Implementation (TS570)
 or be familiar with TSM Implementation.

## Objectives:

After completing this course, you should be able to:

- Configure and administer Tivoli Storage Manager's enterprise administration environment
- Configure and administer Tivoli Storage Manager's server-to-server virtual volumes environment
- Perform both client and server trace functions
- Recover the Tivoli Storage Manager database or a single Tivoli Storage Manager database volume
- Recover a Tivoli Storage Manager primary storage pool or a single Tivoli Storage Manager primary storage pool volume
- Write and execute server scripts for automation
- Change key Tivoli Storage Manager performance parameters to their recommended values

## Contents:

- Basics of TSM 5.1
- Day-to-day operations
- Client functions
- Database mirror and storage pool volume determination
- Working with tape libraries
- Network configuration issues and Tivoli Storage Manager performance tuning
- Trace function
- Problem determination with database volumes and storage pools
- Tivoli Storage Manager reporting
- Enterprise administration
- Using server-to-server volumes

## Course Delivery:

This course has Lecture, hands-on and written exercises

TS590- Tivoli Disaster Recovery Manager 5.1

Course Code: WW TS59G or TM56G, US TS590

**Duration: 2 Days** 

## Overview:

This course helps you to prepare a disaster recovery plan, manage off-site volumes and restore systems using Tivoli Disaster Recovery Manager. You will learn and practice skills needed to implement and administer IBM Tivoli Disaster Recovery Manager by creating a customized disaster recovery plan to help you recover an IBM Tivoli Storage Manager server and client. You will use the plan to back up the necessary server files, a database, and a storage pool onto removable media for off-site storage vaulting. Using IBM Tivoli Storage Manager server-to-server communications, the plan will also be used to back up to remote virtual volumes for off-site electronic vaulting. Hands-on exercises provide the opportunity to test your customized Disaster Recovery Plan by restoring the server files, database, storage pool, and client.

#### Audience:

Consultants, architects, project managers, implementers, and Business Partners who perform hands-on implementation or administration of TSM 5.1

## Prerequisites:

You should complete:

Tivoli Storage Manager 4.2 Implementation (TS570)
 or be familiar with TSM Implementation.

#### Objectives:

After completing this course, you should be able to:

- Perform initial setup requirements to use Tivoli Disaster Recovery Manager
- Create and use customized disaster recovery plan files
- Configure IBM Tivoli Storage Manager to use removable media for off-site storage of critical files used during disaster recovery
- Perform routine disaster recovery media management
- Simulate a disaster and then recover an IBM Tivoli Storage Manager server and client data using IBM Tivoli Disaster Recovery Manager files stored on removable media
- Configure IBM Tivoli Storage Manager to use server-to-server communications for electronic vaulting of critical files used during disaster recovery
- Simulate a disaster and then recover an IBM Tivoli Storage Manager server and client data using the IBM Tivoli Disaster Recovery Manager files stored electronically on another server

#### Contents:

- IBM Tivoli Storage Manager database and storage pool backup review
- IBM Tivoli Disaster Recovery Manager features

- Suggested methods on testing your disaster recovery plan
- Initial setup requirements to use IBM Tivoli Disaster Recovery Manager
- Preparing a customized disaster recovery plan file
- IBM Tivoli Disaster Recovery Manager removable media tape management
- Backing up the IBM Tivoli Storage Manager system to removable media for off-site storage
- Using the media to recover the system
- Using disaster recovery plan files
- How server-to-server communications can be used by IBM Tivoli Disaster Recovery Manager for electronic vaulting of storage pool backups, database backups, and recovery plan files

This course has Lecture, hands-on and written exercises

## TV004G - Tivoli NetView 7.1 for UNIX for Administrators

Course Code: WW TV04G, US TV070

**Duration: 5 Days** 

# Overview:

Learn how to install and configure IBM Tivoli NetView 7.1 for UNIX. Gain the skills needed to model your enterprise network, configure polling for critical network resources, filter and forward events as needed, and export collected data for analysis. Practice the skills you learn during many hands-on labs.

#### Audience:

Network administrators responsible for the installation, configuration, and management of NetView servers, clients, and Mid-Level Managers (MLM).

## Prerequisites:

Tivoli NetView for UNIX operations Intermediate UNIX administration, including the ability to traverse filesystems, manipulate files, read and write startup files and scripts, and view processes TCP/IP network management experience, including familiarity with router configuration, bridging, switching, routing technologies, broadcast and multicast addressing, and Simple Network Management Protocol (SNMP) configuration Shell script writing and reading Experience configuring a Web server Network File System (NFS)

implementation and administration OR Tivoli Management Framework

## Objectives:

After completing this course, you should be able to:

 Perform basic installation and configuration of the NetView server, traditional client, Web client, and MLMs

- Migrate from a previous version of NetView
- Change Internet Protocol (IP) address and hostname of NetView server
- Manage the size, location, and aging of network logs
- Manage NetView daemons and databases
- Define custom event filters, configure traps, and customize event applications
- Customize discovery of the network and status polling of devices on the network
- Customize the NetView interface, including X-windows display, symbol properties, submap layout, menu bar options, and custom objects
- Load new Management Information Base (MIB) and use the MIB Browser to configure SNMP on devices
- Create new SmartSets for objects providing a certain service or meeting specified criteria
- Use data collections and identify threshold routines for collection of SNMP data
- Build MIB applications to monitor system and network activity

#### Contents:

- · Tivoli NetView for UNIX overview
- · Installing and configuring NetView server and client
- Working with NetView databases
- Discovering the network
- Using SmartSets
- Customizing the map
- Using NetView MIB tools
- Managing events
- Installing and configuring MLMs

# **Course Delivery:**

This course has Lecture, hands-on and written exercises

#### TV06G - Tivoli NetView 6.1 for NT Administrators

Course Code: WW TV06G. US TV060

**Duration: 5 Days** 

#### Overview:

Learn how to install and configure IBM Tivoli NetView 7.1 for NT. Gain the skills needed to model your enterprise network, configure polling for critical network resources, filter and forward events as needed, and export collected data for analysis. Practice the skills you learn during many hands-on labs.

## Audience:

Individuals who plan, install, implement, or support Tivoli NetView for Windows NT. Individuals responsible for providing network management services within an enterprise.

## Prerequisites:

You should have intermediate NT server administration skills, Transmission Control Protocol / Internet Protocol (TCP/IP) and Simple Network Management Protocol (SNMP) advanced experience and debugging skills, and understand general networking concepts, including routing, bridging, switching, and address resolution.

## Objectives:

After completing this course, you should be able to:

- Install and configure NetView server, traditional client, Web client, and Mid-Level Managers (MLM)
- Migrate from a previous version of NetView
- Change the Internet Protocol (IP) address and hostname of a NetView server
- Manage the size, location, and aging of network logs
- Manage NetView daemons and databases
- Define custom event filters, configure traps, and customize event applications
- Customize discovery of the network and status polling of devices on the network
- Customize the NetView interface, including symbol properties, submap layout, menu bar options, and custom objects
- Load new Management Information Bases (MIB) and use the MIB browser to configure SNMP on devices
- Create new SmartSets for objects providing a certain service or meeting specified criteria
- Use data collections and identify threshold routines for collection of SNMP data
- Build MIB applications to monitor system and network activity
- Configure Web Based Enterprise Management (WBEM) and use Wake-on-LAN features
- Describe the differences between NetView for NT and NetView IT Director Edition

# Contents:

- Tivoli NetView for NT overview
- Installing and configuring NetView server
- Installing and configuring NetView client
- Working with NetView databases
- Discovering the network

- Using SmartSets
- Customizing the map
- Using NetView MIB tools
- Managing events
- Installing and configuring MLMs
- WBEM and Wake-on-LAN support

# Course Delivery:

This course has Lecture and hands-on exercises

#### NW48 - TCP/IP Architecture

Course Code: NW48 (S9107 in Canada)

**Duration: 3.0 Days** 

#### Overview:

Learn the architectural structure of TCP/IP, the concepts and content of the major protocols, and the key TCP/IP applications.

#### Audience:

Information systems telecommunications personnel who need an understanding of TCP/IP architecture, standards, and protocols, or who are planning to attend implementation or management courses.

#### Prerequisites:

Data Communications Environment (G3645) or have equivalent experience.

## Objectives:

By the successful conclusion of this course, you should be able to:

- Understand the concepts and terminology of TCP/IP
- · Describe the basic components and structure of the Internet model
- · Describe the functions of the Internet
- Describe IBM's current TCP/IP products

#### Content:

- · Architecture and standards
- Protocols
- · Applications

## Course Delivery:

This course is structured in an Instructor-led, lecture only, classroom format.

This course is structured in an Instructor-led, lecture only, classroom format.

## IN29 - Internet Security and Firewalls Concepts

Course Code: WW IN29, US N3202, CA S0591E

**Duration: 2.0 Days** 

#### Overview:

This course explains what the Internet is and the many risks involved in connecting to the Internet. The course explains how to use so-called "firewalls" to safely connect to the Internet. Cryptography is considered vital to support electronic commerce on the Internet. An overview of basic cryptographic concepts is given.

#### Audience

Systems engineers and systems managers who will be responsible for their company's secure connection to the Internet

## **Prerequisites**

A basic knowledge of computer networks and TCP/IP is assumed. Suitable introductory courses are

- TCP/IP Architecture (G3740) or
- Introduction to TCP/IP (NW14U)

## Objectives

On completion you will know how:

- What the Internet is, and how it works
- The risks involved in connecting to the Internet
- The basic firewall components
- The typical firewall configurations
- The planning considerations in regard to DNS and Sendmail.

Attendees will also have a basic understanding of the cryptographic techniques being used on the Internet.

## Contents

- Internet overview and network security
- TCP/IP protocols and security considerations TCP/IP applications and security considerations Network security building blocks DNS and planning considerations e-mail and planning considerations Cryptography Overview.

# IN33 - IBM Firewall for AIX

Course Code: WW IN33, US N3203, CA S0625

**Duration: 3.0 Days** 

#### Overview:

This course teaches you how to install and configure the SecureWay Firewall V 4.1 for AIX. Also, these labs provide real-world experience installing Firewall for AIX, defining Domain Name System (DNS) and Mail Server support, and configuring key firewall functions to support the secure transmission of data.

#### Audience

Systems and networking personnel who are responsible for planning, installing and/or implementing the SecureWay Firewall for AIX product.

# **Prerequisites**

- Basic AIX commands and operating system knowledge
- Working knowledge of TCP/IP
- Internet Security and Firewall Planning (N3202) or equivalent knowledge

#### Objectives

On completion you will be able to:

- List the installation steps required to install the Firewall for AIX product
- Define the Domain Name Server and Mail Server support included with Firewall for AIX
- Exercise the Java GUI interface
- Exercise the customization steps for the various firewall options supported by the Firewall for AIX
- · Discuss the various logging options available with the Firewall product

#### Contents

- Installation Hardening
- Setup Wizard
- Java based GUI
- DNS
- Secure Mail Proxy
- Filter rules
- Socks
- Proxy
- · New IP tunneling support
- · Monitoring and reporting

- Network Security Auditor
- SNMP support
- NAT
- RealAudio support

This course has Lecture, hands-on and written exercises

## IN34 - IBM Firewall for NT Implementation

Course Code: IN34 (IN34C in Canada)

**Duration: 3.0 Days** 

#### Overview:

Learn how to install and configure the IBM SecureWay Firewall V4.1 for Windows NT. Hands-on labs offer first-hand experience installing, configuring, and administering firewall features and functions.

#### **Audience**

Systems and networking individuals, who are responsible for planning, installing, or implementing the IBM SecureWay Firewall for Windows NT product.

## **Prerequisites**

You should complete:

Internet Security and Firewall Planning (N3202)

and be familiar with basic security concepts, TCP/IP including Domain Name Server (DNS) and Sendmail, and Windows NT.

#### Objectives

On completion you will be able to:

- List the installation/customization steps required to install the Firewall for Windows NT product
- Define the DNS and Mail Server support included with Firewall for NT
- Exercise the Java Graphical User Interface (GUI) interface
- Exercise the customization steps of the various firewall options supported by the Firewall for
- Windows NT

#### Contents

- · Windows NT TCP/IP installation and customization
- · Firewall installation
- Java-based GUI
- DNS
- · Mail and Safemail
- Filter rules
- · Monitoring and reporting
- · Firewall user administration
- Proxy services (FTP, Telnet, HTTP)

- Transparent proxies (FTP, Telnet, HTTP)
- Socks V5
- · Network Address Translation
- Virtual Private Networks

# Course Delivery:

This course has Lecture, hands-on and written exercises

# IN36 - PKI Secureway Trust Authority Fundamentals

Course Code: WW IN36, US IN360

**Duration: 1.0 Day** 

#### Overview:

The purpose of this training is to provide an understanding of PKI and Trust Authority to those who work with PKI and Trust Authority.

#### Audience

This course is intended for students who wish to improve their understanding of the Public-Key Infrastructure (PKI) and Trust Authority technologies at a fundamental level.

## Prerequisites

There are no prerequisites for this course.

# Objectives

On completion you will be able to:

- Discuss the importance of e-business in Trust
- Explain Public-Key Infrastructure (PKI).
- Describe Trust Authority components, processes, and resources.

#### Course Delivery:

This course has Lecture, hands-on and written exercises

# IN37 - PKI Secureway Trust Authority Planning and Implementation

Course Code: WW IN37, US IN370

**Duration: 4.0 Days** 

#### Overview:

This course prepares those who install, use, and maintain IBM SecureWay Trust Authority to effectively implement Trust Authority solutions. Through lecture, discussions, demonstrations, and hands-on labs, students see what is needed in order to provide effective Trust Authority solutions.

## **Audience**

The primary audience for this training consists of system integrators, product specialists, system engineers, solution architects, customers, and IBM Business Partners. This course is not intended for marketing or sales personnel.

# **Prerequisites**

The prerequisite knowledge and skills for this course are:

- Windows/NT (Level 4) or AIX (Level 4)
- Domain Name Server (DNS) (Level 3)
- Simple Mail Transfer Protocol (SMTP) (Level 3)
- Networking: TCP/IP, routing packet filtering, DNS and networking hardware (Level 3+)
- Basic Crypto (Level 2)
- PKI knowledge (Level 2+)
- Basic X.500/LDAP Directory skills (Level 3 if creating new database, Level 4 if using existing database)
- PKIX infrastructure and standards (Level 2)
- Project Planning (Level 3)
- DB2 (Level 3)
- HTML, JAVA script, C++ (Level 2+)
- Web server (Level 2)
- Trust Authority (Level 2)

## Objectives

On completion you will be able to:

- Articulate the capabilities of Trust Authority
- Identify the main components of a Trust Authority system.
- Describe Trust Authority architecture
- Plan and implement Trust Authority
- Install and configure Trust Authority
- Use and maintain Trust Authority
- Customize Trust Authority
- Test and Troubleshoot Trust Authority

# Course Delivery:

This course has Lecture, hands-on and written exercises

TW010 - Tivoli Workload Scheduler 7.0 Scheduling and Operations

Course Code: WW TX30G, US TW010

**Duration: 2.0 Days** 

#### Overview:

Learn how the Tivoli Workload Scheduler (TWS) can schedule, coordinate and automate mission-critical application execution across the enterprise. Gain an understanding of the TWS features, environment, and new terminology. Learn to plan, implement, monitor, and efficiently manage a TWS Production Day Plan. Learn about the new Job Scheduling Console and time zone feature. Build a plan by defining and documenting the plan objects and their properties and use recovery options, external dependencies, prompts and other plan objects to design job and job stream instances. Develop valuable skills for optimizing and troubleshooting plans. This training is in a classroom environment with hands-on laboratory exercises.

#### **Audience**

New Tivoli Workload Scheduler users seeking proficiency in the TWS 7.0 environment on UNIX and Windows NT platforms. Existing schedulers, operators and their supervisors and /managers at sites converting from previous versions of Tivoli Workload Scheduler (Maestro) to Tivoli Workload Scheduler 7.0.

# Prerequisites

You should have:

- General computer literacy in a Graphical User Interface (GUI) environment
- An understanding of production management and batch processing scheduling
- Knowledge of current production job processing flow in the local environment
- Knowledge of file navigation, file editing, and command prompt actions for the UNIX. or NT operating systems

## **Objectives**

On completion you will be able to:

- Describe how TWS launches and monitors Jobs from Job Stream instances
- Filter displayed database and plan information using list groups and list properties
- Specify properties and external dependencies for Jobs and Job Streams
- Submit job instances and job stream instances into an existing plan
- Use the Job Scheduling Console (JSC) to monitor job stream instances, job instances and objects on the current plan list
- Troubleshoot job stream execution, TWS plans and network problems
- View and print Job Stream documentation, Job instance output and standard reports
- Stop and start TWS processes, link and unlink workstations and switch workstation domain managers
- Configure TWS Job automated recovery options
- Integrate Parameters and environment variables into local configuration scripts
- Construct a Processing Flow Diagram and general Job Stream processing Plan
- Compose a Job Stream from Job Stream objects, including Job definitions
- Identify problems using basic Audit and Trace utility techniques
- Use the command line interface to perform Database object ASCII backups and mass updates

#### Contents

- TWS Scheduling and Objects Overview
- Plan Monitoring and Management
- Plan Problem-Solving Approaches
- Submitting Additional Work
- · Job Stream Objects & Planning
- Creating and Optimizing Job Streams
- Job Stream Problem Solving Approaches

## Course Delivery:

This course has Lecture, hands-on and written exercises

# TW040 - Tivoli Workload Scheduler 8.0 Administration

Course Codes: WW TX25G, US TW040

#### Overview

Develop the skills you need for network planning, installation, maintenance, configuration, and problem solving for Tivoli Workload Scheduler (TWS) 8.1. Take an in-depth look at the background processes, the TWS production cycle, and production processing. Learn about different types of TWS workstations, advantages of domains, and designing a network to meet the needs of your organization. Practice your skills in hands-on labs, including planning a network, defining a workstation and domain, installing a new TWS workstation, and TWS components.

## Skills taught

- Plan a TWS network to meet the needs of an organization
- Describe the TWS processes, their functions, and their interaction
- Locate critical files and directories in the TWS directory structure
- Install and configure TWS network and the individual workstations, including the time zone
- Manage TWS security
- Configure Framework for TWS
- Perform maintenance functions
- Backup the master domain manager
- Troubleshoot problems in the TWS network

# Audience

TWS system and network administrators who plan the network, install, maintain, configure, and solve problems for TWS 8.1.

# **Prerequisites**

You should complete:

- Tivoli Workload Scheduler 8.1 Scheduling and Operations (TW050)
- Tivoli Management Framework 3.7 (TM150)

and have working knowledge of UNIX and NT operating systems.

## **Key topics**

- Scheduling
- Network planning
- Domain and workstation definitions
- TWS processes
- TWS engine installation
- Security
- Updating and patching
- Database backup and maintenance
- Troubleshooting

# Course Delivery:

This course has Lecture, hands-on and written exercises

# TW050 - Tivoli Workload Scheduler 8.0 Scheduling & Operations

Course Codes: WW TX30G, US TW050

# Overview

Learn the features, environment, and new terminology of Tivoli Workload Scheduler (TWS) 8.1. Through classroom lecture and hands-on labs, gain the skills you need to plan, implement, monitor and efficiently manage a TWS Production Day Plan. Learn about the new Tivoli Business Systems Manager (TBSM) integration, free day rule, multiple holiday calendars, and Linux support. Learn details on the building of a plan by defining and documenting the plan objects and their properties. Design job and job stream instances using recovery options, external dependencies, prompts and other plan objects.

## Skills taught

- Define the differences between TWS database and plan objects and instances
- Describe how TWS launches and monitors jobs from job stream instances
- Filter displayed database and plan information using list groups and list properties
- Navigate and utilize the TWS Job Scheduling Console (JSC) interface
- Change TWS workstation properties and execute workstation processes
- Execute plan control commands: submit, reply, rerun, cancel, and kill

- Monitor job stream instances, job instances and objects on the current plan list using the JSC
- Identify and resolve problems with job stream execution
- Interact with TWS through command line utilities such as parms, release, and conman commands, such as switchmgr and shutdown
- Configure TWS job automated recovery options
- Integrate parameters and environment variables into local configuration scripts
- Understand how to optimize TWS job streams and to make them system independent

#### Audience:

New TWS users seeking proficiency in the TWS 8.1 environment on UNIX and Windows NT platforms. Also, existing schedulers, operators, and their supervisors and managers at sites converting previous versions of TWS (formerly Maestro) to TWS Suite 8.1. Prerequisites

Knowledge of current production job processing flow in the local environment where TWS will be implemented. Knowledge of file navigation, file editing, and command prompt actions for UNIX or NT operating systems.

# Key topics:

- TWS scheduling and objects overview
- Job stream objects
- Job stream planning
- Creating and optimizing job streams
- Plan monitoring and management
- Plan problem solving approaches
- Submitting additional work
- Job stream problem solving approaches

## **Course Delivery:**

This course has Lecture, hands-on and written exercises

## TW020 - Tivoli Workload Scheduler 7.0 Administration

Course Code: WW TX25G, US TW020

**Duration: 2.0 Days** 

#### Overview:

Tivoli Workload Scheduler (TWS) manages workloads in today's distributed computing environments. TWS' underlying architecture ensures that business and mission-critical applications run within an infrastructure that is secure, fault tolerant, and scalable. Study network planning, installation, maintenance, configuration and problem solving. Gain an in-depth look at the TWS background processes, production cycle and

production processing. The network planning discussion will include information on the types of TWS workstations, advantages of domains and of designing a network to meet the needs of your environment. Training is delivered in a classroom environment with multiple opportunities to practice concepts by performing lab exercises.

#### **Audience**

TWS system and network administrators who are responsible for TWS 7.0 network planning, installation, maintenance, configuration and problem solving, or who are converting to 7.0 from earlier versions.

## **Prerequisites**

You should complete:

- Tivoli Workload Scheduler Scheduling and Operations (TW010)
- Tivoli Management Framework (TM150)

# **Objectives**

On completion you will be able to:

- Describe the TWS processes, their functions and interaction
- Customize job execution
- · Plan, install and configure a TWS network and individual workstations
- Manage TWS security
- · Configure the auditing feature
- · Create a Symphony file
- · Generate reports
- · Create workstation and domain definitions in the TWS database
- Plan TWS and Framework workstation installation.
- Update an installation of TWS
- Configure Framework for TWS
- · Perform maintenance functions
- · Backup the master domain manager
- Troubleshoot problems in the TWS network

## Contents

- · Scheduling
- Network Planning
- · Domain and Workstation Definitions
- · Tivoli Workload Scheduler Processes
- TWS Engine Installation
- Other Installations
- Security
- Configuration

#### Course Delivery:

This course has Lecture, hands-on and written exercises

TW12G - Tivoli Access Manager for Business Integration 4.1 System Administration

Course Code: WW TW12G, US TR440

**Duration: 3.0 Days** 

### Overview:

Learn about IBM Tivoli Access Manager for Business Integration, a comprehensive security management solution for IBM WebSphere MQ. It allows you to set a specific message data protection policy that is enforced on each message. Data protection options include message integrity (signing) and confidentiality (encryption). Message integrity services are provided using digital signatures that are based on public/private keys associated with the sending and receiving applications. You can now secure sensitive transactions end-to-end, with no gaps while messages are resident in queues, unlike when using channel-exit based solutions.

#### **Audience**

System or network administrators who are responsible for IBM WebSphere MQ security.

#### **Prerequisites**

You should possess the following skills:

- Basic operating system administration skills for Windows 2000
- Basic knowledge of IBM Tivoli Access Manager for e-business
- Basic knowledge of Public Key Infrastructure (PKI) technology
- Experience with IBM WebSphere MQ

# **Objectives**

On completion you will be able to:

- Install and configure IBM Tivoli Access Manager for e-business 4.1 components and supporting software
- Install IBM WebSphere MQ
- Install and configure IBM Tivoli Access Manager for Business Integration 4.1
- Use Web Portal Manager to create Access Manager for e-business user, group, access control list (ACL), and Protected Object Policy (POP)
- Use Web Portal Manager to manage IBM Tivoli Access Manager for Business Integration objects
- Create public key certificates and private key stores for IBM Tivoli Access Manager for Business Integration applications
- Map Public Key (PK) certs to IBM Tivoli Access Manager for e-business users
- Use IBM Directory Server 4.1 as user registry for IBM Tivoli Access Manager for Business Integration
- Use commands of IBM Tivoli Access Manager for Business Integration
- Send and receive IBM WebSphere MQ messages with security protection of integrity and privacy
- Identify and correct common errors

## Contents

- DB2, Lightweight Directory Access Protocol (LDAP), IBM Hypertext Transfer Protocol (HTTP) Server, and IBM Tivoli Access Manager for e-business 4.1 installation
- IBM WebSphere MQ installation
- IBM Tivoli Access Manager for Business Integration 4.1 installation
- Creating and configuring ACLs
- Creating and configuring POP objects for controlling access to gueues
- Managing IBM Tivoli Access Manager for Business Integration object space
- IBM Tivoli Access Manager for e-business action groups
- IBM Tivoli Access Manager for Business Integration generated log and audit files

# Course Delivery:

This course has Lecture, hands-on and written exercises

# TS20G - Tivoli Storage Resource Manager V1.2

Course Code: WW TS20G, US TS200

**Duration: 2.0 Days** 

#### Overview:

Learn to use the features and functions of IBM Tivoli Storage Resource Manager to administer and manage your organization's storage resources and help meet its storage resource management needs. Through lecture and during hands-on exercises, install and configure the IBM Tivoli Storage Resource Manager server and agent, navigate through IBM Tivoli Storage Resource Manager's interface, and monitor, evaluate, and report on the managed storage resources. The skills you develop in this course apply to all IBM Tivoli Storage Resource Manager agent and server platforms.

#### Audience

Storage Area Network (SAN) system administrators and implementers.

## **Prerequisites**

You should be familiar with:

- File system, volume, Logical Unit Number (LUN), and disk management
- Basic database administration (DB2, Oracle, Sybase, or SQL)
- Storage administration, including SAN

#### Objectives

On completion you will be able to:

- Describe IBM Tivoli Storage Resource Manager's main features and functions
- Explain the IBM Tivoli Storage Resource Manager architecture
- Install the server and the agent
- Fine tune and configure your installation
- Uninstall IBM Tivoli Storage Resource Manager
- Navigate through IBM Tivoli Storage Resource Manager's interface
- Define a file filter to create a custom profile
- Create computer, filesystem, and directory alerts
- Describe the policy management functions of IBM Tivoli Storage Resource Manager
- Create quotas and constraints
- Learn how to use IBM Tivoli Storage Resource Manager's Triggered Action Facility by running scripts
- Learn how to use IBM Tivoli Storage Resource Manager's Scheduled Action Facility by running scripts
- Understand how to use scripts within IBM Tivoli Storage Resource Manager
- Navigate through the reporting tree
- View system reports
- Generate and manipulate reports
- Create batch reports

## Contents

- IBM Tivoli Storage Resource Manager overview
- Configuration and getting started
- Installing IBM Tivoli Storage Resource Manager
- Monitoring
- Alerts
- Policy management
- Using scripts
- Reporting

## Course Delivery:

This course has Lecture, hands-on and written exercises

# Publications and Web Based Training

Title: The Domino Defense, Security in Lotus Notes and the Internet:

Publication Number: SG24-4848-00

## Overview:

This technical reference book (redbook) will help you understand the value of the security facilities provided by Lotus Notes and by the World Wide Web and then shows how they are brought together productively in the Domino server. An example application that illustrates a practical implementation of these concepts is provided. This book also assists you in determining the correct placement of Domino servers within an Internet firewall using detailed examples.

# TIV45 - Tivoli Access Manager for e-business 3.8 Architecture & Solutions

Course Code: TIV45 (SV31-8151)

**Duration:** 

#### Overview:

This course begins with guidelines to initiate an Access Manager for e-business engagement. Business and technical requirements are assessed. After specifying integration requirements, a high-level solution architecture is presented. User Registry design methodology is discussed and PKI integration issues are explored. Authorization Policy implementation using Authorization Servers and Authorization API is presented. This course also covers IBM Tivoli Access Manager for WebSphere, IBM Tivoli Access Manager Plug-in for Edge Server, and IBM Tivoli Access Manager for Weblogic Server. Included is a presentation on J2EE applications covering JAAS and J2EE security in WebSphere 4.02 and how Access Manager provides this support without requiring any coding or deployment changes to the application

#### Audience:

Tivoli services consultants, sales engineers, and deployment engineers responsible for designing security infrastructures using IBM Tivoli Access Manager 3.9.

## Prerequisites:

Tivoli SecureWay Policy Director Fundamentals 3.8 (WT160)

and be familiar with:

- Web server fundamentals
- PKI fundamentals
- Security policy management concepts
- Security communication protocols
- Networking concepts
- Firewall concepts
- Directory services fundamentals
- Asic Web page development fundamentals, including security issues

# **Course Delivery:**

Computer Based Training

## TIV59 - Tivoli Access Manager for e-business 3.9 System Administration

Course Code: TIV59 (SV31-5083)

#### **Duration:**

#### Overview:

Develop the skills to install and configure IBM Tivoli Access Manager for e-business 3.9 to secure Hypertext Transfer Protocol (HTTP) servers and other e-business resources.

#### Audience:

System or network administrators who maintain a large number of users who require access to specific information resources.

## Prerequisites:

- Tivoli Policy Director 3.8 Fundamentals (CD) (TIV16)
- and possess the following skills and knowledge:
- Basic administration of UNIX and Windows NT/2000
- Lightweight Directory Access Protocol (LDAP) installation experience
- TCP/IP networking fundamentals
- · Firewall concepts
- Working knowledge of Web protocols (HTTP, and Extensible Markup Language (XML))
- · Reading, interpreting, and creating regular expressions
- Shell script writing and reading

#### Content:

- Installing DB2, LDAP (and LDAP replica), IBM HTTP Server, and IBM Tivoli Access Manager for e-business components
- Load balancing
- Creating IBM Tivoli Access Manager for e-business users and groups using the Web Portal Manager and pdadmin
- Configuring WebSEAL
- Configuring Delegated Administration
- Creating and configuring Access Control Lists (ACL)
- Creating and configuring SSO targets Tivoli Policy Director 3.8 to IBM Tivoli Access Manager for e-business 3.9 migration

## Course Delivery:

Computer Based Training

#### Enterprise Business Portal with IBM Tivoli Access Manager

Publication title: Enterprise Business Portals with IBM Tivoli Access Manager

Publication order number: SG24-6556-00

Abstract: This redbook explains the planning steps and describes how to build multi-level enterprise business portals with the new Tivoli Access Manager Version 3.9. It also discusses high-availability scenarios and platform coverage for various involved components like Web servers, registries, and Access Manager management components. It shows the integration of Access Manager into the IBM WebSphere Application Server, IBM WebSphere Everyplace Suite, BEA WebLogic application server,

Siebel, and other products.

## Tivoli Sales 101

## IBM Tivoli software is ready for the on demand world!

The Tivoli Sales 101 is an online tutorial which looks at the need for e-business on demand and how IBM Tivoli Software addresses this need. In this tutorial Business Partners will learn what the major challenges are in the on demand world and how IBM Tivoli provides solutions to meet these challenges. IBM Tivoli Software provides software for managing the e-business on demand infrastructure. Business Partners completing this tutorial will have an understanding of what management disciplines IBM Tivoli's Intelligent Management software covers, how IBM Tivoli has solutions for all industries, and how IBM Tivoli can help any size business.

**What is taught:** This tutorial focuses on how Tivoli Software provides Intelligent Management Software that is integrated for efficiency, automated for productivity, and optimized for business value.

## **Prerequisites**

There is no prerequisite knowledge required for this course.

#### How to enroll

•The Tivoli Sales 101 online course is scheduled to be available in April, 2003.

http://www.ibmweblectureservices.ihost.com/servlet/Gate/Offering?action=index&customer=PARTNERWORLD&offering=pw

Delivery Method: Online Cost: Free

#### Tivoli Sales 201

Tivoli Sales 201 is a part of the <u>IBM Software Sales Roadmap</u>. This roadmap is your guide to the IBM Tivoli Software sales training which helps you learn how to effectively and quickly close a sale. This course covers the broad portfolio of IBM Tivoli Software Systems management solutions. The Tivoli products and solutions are grouped into four main categories: Storage, Security, Performance and Availability and Configuration & Operation. The course covers the Systems Management marketplace, an overview of the Channel products in the Tivoli product line, value propositions and best customer scenarios in identifying opportunities. Business Partners completing this class will have an understanding of the Tivoli product line and how to identify sales opportunities.

#### Who should take this course

Your firm must be an active Business Partner in PartnerWorld for Software.

#### What you are taught

The purpose of this course is to enable Business Partners to understand the Tivoli product line and recognize a qualified Tivoli opportunity. The expectation from your participation in this workshop is that you identify Tivoli products that you will want to add to your practice and sign up for a Tivoli Advanced Selling Workshop.

You can test your skills by taking the web based <u>Tivoli Sales Mastery Test</u>. Passing this test proves your Tivoli sales skills, gives you a Tivoli Solution Sales Professional Certificate, and counts toward the PartnerWorld for Software sales skill criteria.

## Prerequisites

There is no prerequisite.

#### How to enroll

The online course is now available.

The Tivoli Sales 201 is also available at events in select locations:

- •North America, view the <u>IBM Software Cross-Brand Sales Roadshow</u> Web site in the Sales training section of the Business Partner Zone.
- •All other geographies, please contact your <u>PartnerWorld Contact Services</u> or contact your IBM representative.

#### Course details

Delivery Method: Online and events in select locations Cost: Free

## AD60 - IBM WebSphere Studio Workshop

Course Code: AD60 WW, N4420 US, N4420E Canada

**Duration: 3 Days** 

#### Overview:

Learn to design and assemble Web sites. Learn how to build a sample Web site for the fictitious JKToys Toy Company and publish the Web site to a Web server for users to view.

Focus on IBM WebSphere Studio Version 4.0 and related products and topics, including WebSphere Page Designer.

Applet Designer, and Web server concepts. Learn how the WebSphere Studio tools interact, when to use each tool, and the key considerations in user friendly Web site design. Advanced topics include how to generate dynamic Web site content and how to utilize the WebSphere Studio wizards. Also, learn how to deploy JavaServer Pages (JSPs), JavaBeans, servlets, and applets from Studio.

#### Audience:

Individuals who design and assemble Web sites and generate dynamic content.

## Prerequisites:

You should have:

- Knowledge of the World Wide Web and the Internet
- Experience creating Web sites, writing Hypertext Transfer Protocol (HTTP), and deploying applets
- Experience with a Web server and a relational database

## Objectives:

At the end of this course, users should be able to:

- Design, build, and assemble medium complexity Web sites and e-business applications using the IBM WebSphere Application Server, WebSphere Studio, and related products
- Generate dynamic Web site content
- Deploy JSPs, JavaBeans, servlets, and applets into Web pages

## Contents:

- Using the Studio Workbench to manage assets and import Web sites
- Using WebSphere Page Designer (tables and frames, Stylesheet Manager, and Web Art Designer)
- Using Applet Designer
- Launching and using other tools from WebSphere Studio
- WebSphere application model
- The IBM HTTP Server
- Using the Studio wizards to create dynamic content (servlets and JSPs)
- Adding dynamic content through use of JavaBeans

- Deploying the JKToys Web site for the e-business environment
- Introduction to IBM WebSphere Studio

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## WF30 - Developing ServerSide Applications with IBM WebSphere

Course Code: WF30 WW, WF301 US, WF301CE Canada

**Duration: 4.5 Days** 

#### Overview:

Learn to develop and test server-side applications based on the Java 2 Platform, Enterprise Edition (J2EE) component model, using IBM WebSphere software platform products and tools. Develop and test server-side applications that use servlets and JavaServer Pages (JSPs) for the control and flow of e-business applications. Develop servlets, JSPs and JavaBeans with IBM WebSphere tools: VisualAge for Java and WebSphere Studio for building servlets and JSPs, the WebSphere Test Environment in

VisualAge for Java for unit testing, and the WebSphere Application Server Advanced Edition (WAS-AE) Single Server for integration testing.

Learn the best practices for building J2EE e-business applications, including the use of the Model-View-Controller

(MVC) framework to separate concerns among the JavaBeans, JSPs, and servlets in the application, and JUnit for testing the components.

Learn about deployment issues pertinent to the developer. Use WebSphere Application Server, Version 4.0 (Single Server), VisualAge for Java, Version 4.0, and WebSphere Studio, Version 4.0 during the course.

#### Audience:

Java application developers who build Web-based server-side applications.

#### Prerequisites:

You should complete:

- Object-Oriented Programming Using VisualAge for Java (OB79) or
- Object Oriented Programming with Java (OB72) or
- Java Programming Using VisualAge for Java (OB77) or
- Java Programming (OB73)
- Introduction to Server-Side Programming (VJ10A) (online) or on CR-ROM SV31-6774
- Ultimate VisualAge for Java Tutorial CD (SR23-9630)
- or have equivalent skills to develop, test, and deploy Java applications, understand server-side Java applications, and understand the use of the VisualAge for Java Integrated Development Environment (IDE).

#### Objectives:

After satisfactorily completing this course, you should be able to:

- Describe the J2EE component model and its use in building server-side applications
- Develop, debug, and test server-side applications using IBM WebSphere tools:
   VisualAge for Java, WebSphere Studio, and WAS-AE Single Server
- Develop and test servlets using IBM WebSphere tools: VisualAge for Java
- Develop and test JSPs using IBM WebSphere tools: WebSphere Studio and VisualAge for Java
- Develop and test JavaBeans using IBM WebSphere tools: VisualAge for Java
- Use JavaBeans, JSPs, and servlets in accordance with the MVC programming model
- Use Java Database Connectivity (JDBC) to access databases in the model application layer
- Use existing Enterprise Java Beans (EJBs) for business logic
- Assemble and perform integration testing of J2EE based applications using the IBM WebSphere tools and WAS-AE Single Server
- Identify the best practices needed to design and build Web applications (application frameworks and design patterns)

#### Contents:

- Develop and test servlets
- Develop and test JSPs
- Develop and test J2EE based applications using sound application architecture (MVC, JUnit, and scalable architecture)
- Develop and test business logic using JavaBeans and JDBC

## **Course Delivery:**

This course is structured in an Instructor-led, Classroom format with hands-on sessions form a vital, integral part of the course.

# WF31 - Servlet and JSP Development using WebSphere Studio Application Developer V5.0

Course Code: WF31 WW, WF311 US,

Duration: 4.5 Days

#### Overview:

Learn to develop and test server-side applications based on the Java 2 Platform, Enterprise Edition (J2EE) component model, using IBM WebSphere software platform products and tools. Develop and test server-side applications that use servlets,

JavaServer Pages (JSPs), JSP custom tags, and servlet filters for the control and flow of e-business applications.

Develop and test servlets, servlet filters, JSPs, JSP custom tags, and JavaBeans with WebSphere Studio Application Developer and use the WebSphere Application Server for integration testing. Learn the best practices for building J2EE e-business applications, including the use of the Model-View-Controller (MVC) framework to separate concerns among the JavaBeans, JSPs, and servlets in the application.

Learn about deployment issues pertinent to the developer. Use WebSphere Application Server, Version 5.0 and WebSphere Studio Application Developer, Version 5.0 during the course.

### Prerequisites:

Your should complete:

Developing and Testing OO Applications with Java (JA341)

Online product tutorial (part of the normal installation of WebSphere Studio Application Developer)

**or** have equivalent skills to develop, test, and deploy Java applications, understand server-side Java applications, and understand the use of the WebSphere Studio Application Developer tool.

#### Objective:

Describe the J2EE component model and its use in building server-side applications

Develop, debug, and test server-side applications using IBM WebSphere tools: WebSphere Studio Application Developer, and WAS-AE Single Server Develop and test servlets using IBM WebSphere tools: WebSphere Studio Application Developer (application frameworks and design patterns) Develop and test JSPs using IBM WebSphere tools: WebSphere Studio Application Developer

Develop and test JavaBeans using IBM WebSphere tools: WebSphere Studio Application Developer

Use JavaBeans, JSPs, and servlets in accordance with the MVC programming model

Use Java Database Connectivity (JDBC) to access databases in the model application layer

Use existing Enterprise JavaBeans (EJBs) for business logic

Assemble and perform integration testing of J2EE based applications using the IBM WebSphere tools and WAS-AE Single Server

Identify the best practices needed to design and build Web applications (application frameworks and design patterns)

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format with hands-on sessions form a vital, integral part of the course.

## PW531G - IBM WebSphere Portal V4 Application Development

Course Code: PW531G WW, PW531 US, SW246 ECIS

**Duration:** 4.5 Days

#### Overview:

IBM's WebSphere Portal Solution provides a single point of interaction with dynamic information, applications, processes and people to help build Business-to-Employee (B2E), Business-to-Business (B2B) and Business-to-Consumer (B2C) portals. Build the skills and knowledge you need to code robust portlet applications using WebSphere Studio Application Developer and WebSphere Portal's Portlet Toolkit.

#### Audience:

IBM customers, Independent Software Vendors (ISV), system integrators, and IBM technical staff members, including architects and developers, who implement portal solutions built on the IBM WebSphere Portal platform.

## Prerequisites:

Introduction to Pervasive Computing (PV10)

and be familiar with the Web, Hypertext Markup Language (HTML), Extensible Markup Language (XML), e-business application concepts, Web servers, and administration of IBM WebSphere Application Server Version 4. You should also complete:

- Servlet and JSP Development using WebSphere Studio Application Developer V5.x (WF311) or
- Servlet and JSP Development using WebSphere Studio V5 (e-tutorial) (WF317)

## Objectives:

- Use the development and test environments provided in the Portlet Toolkit and WebSphere Studio Application Developer
- Write portlets using the portlet Application Programming Interfaces (API)
- Use the portlet tag library to build JavaServer Pages (JSPs) for servicing multiple devices and global reach
- Use the other programmatic interfaces to other WebSphere Portal services, such as the Vault Service, User Management Service, Content Service, and Collaboration Services

### Contents:

- Introduction to the WebSphere Portal Solution
- Introduction to portal administration (installing portlets, managing pages and page groups)
- Customizing portlets and pages (skins, themes, and tabs)
- Introduction to Application Developer and the Portlet Toolkit
- Portlet API

#### Course Delivery:

This course is structured in an Instructor-led, classroom format. Hands-on sessions form a vital, integral part of the course.

## WF35 - EJB Development using WebSphere Studio Application Developer V5.0

Course Code: WF35 WW, WF351 US

**Duration:** 4.5 Days

#### Overview:

Learn how to develop and test server-side Java applications, focusing on business logic using the Enterprise JavaBeans (EJBs) component of e-business applications. Develop and test EJBs using IBM WebSphere Studio Application Developer, including stateless and stateful session EJBs, both Container-Managed Persistence (CMP) and Bean-Managed Persistence (BMP) entity EJBs, and Message Driven EJBs. Create client applications to invoke EJBs. Deploy and test EJBs on IBM WebSphere Application Server. Version 5.0. Examine EJB best practices.

#### Audience:

Java developers who build Web-based server-side Java applications, using Java 2 Platform, Enterprise Edition (J2EE) EJB-based solutions.

**Prerequisites:**Developing and Testing OO Applications with Java (JA341) Online product tutorial (part of the normal installation of WebSphere Studio Application Developer) **or** understand server-side Java applications. You should also have introductory knowledge of WebSphere Studio Application Developer Java (as gained by completing the product tutorial).

#### Objectives:

- Develop and test session EJBs
- Develop and test entity EJBs
- Develop and test Java-based EJB clients
- Develop and test EJBs to effectively interact and utilize container-provided services

- Assemble J2EE components and applications and perform integration testing
- Develop and test J2EE based applications using sound application architecture, for example, Model-View-Controller (MVC) and best practices

## Contents:

- J2EE component model and its use in building server-side applications
- IBM WebSphere tools (WebSphere Studio Application Developer, and WebSphere Application Server, Advanced Single Server Edition) for developing, debugging and testing EJB applications
- Developing and testing EJBs to the EJB V2.0 specification using IBM WebSphere tools (WebSphere Studio Application Developer), including:
- Session EJBs (both stateless and stateful)
- - Entity EJBs (both CMP and BMP)
- EJBs within the MVC programming model
- Creating EJBs for business logic in the model application layer
- Developing, testing, and using EJBs to access databases in the model persistence layer
- Deployment and runtime issues of J2EE-based applications (including security, scaling, and work load management) in the context of WebSphere Application Server, Advanced Single Server Edition
- Assembling and performing integration testing of J2EE based applications using the WebSphere Application Server V5.0

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

#### WF601 - WebSphere Enterprise e-Business Applications with WebSphere

Course Code: WF60G WW, WF601 US, WF601CE Canada

**Duration: 4.5 Days** 

#### Overview:

Explore IBM WebSphere Studio Application Developer 5.0 and learn the component enhancements in Java 2 Platform, Enterprise Edition (J2EE) 1.3 such as Message Driven Beans and the scenarios in which they can be used effectively. Explore the concepts in the lectures and then strengthen the concepts and utilize the tool in the WebSphere Studio Development environment during the lab exercises.

#### Audience:

Individuals wanting to gain WebSphere Studio Developer 5.0 skills.

#### **Prerequisites**

Object-Oriented (OO) design and analyses
Familiarity with Hypertext Markup Language (HTML)
Knowledge about Web servers
Java programming
Familiarity with J2EE 1.2, or WebSphere Studio Developer Version 4.x

#### **Topics**

New features in J2EE 1.3 compared to J2EE 1.2

Overview of WebSphere Studio Application Developer 5.0 and its perspectives Advanced servlet and JSP programming in WebSphere Studio version 5

Using Extensible Markup Language (XML) with in the workbench

Java Messaging Services (JMS) setup and management in WebSphere Studio Version 5 EJB guery language

Container managed relationship for EJBs

EJB local interface

Message driven beans

Using ANT to build applications

Profiling

Java Visual Editor (JVE)

Java Connector Architecture (JCA) overview

Migration

Team support

Security overview WebServices

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

## SW225 - WebSphere JSP & Servlet Development

Duration: 5.0 Days SW225 US / ECIS

#### Overview:

In this five day course, students learn how to write web applications using the JavaTM J2EE technologies. Servlets and JavaServer Pages (JSP) provide a programming model for building robust and scalable web applications. Students also learn to interact with Enterprise Java Beans from their web applications. Students will learn to use WebSphere Studio Application Developer version 5.0 in hands-on activities.

#### Audience:

This course is designed for programmers planning on writing JavaTM J2EE web applications.

#### **Prerequisites**

Students should have solid knowledge of Object-Oriented Programming and the JavaTM language, a basic understanding of WebSphere Studio Application Developer, the ability to read and understand HTML documents, an understanding of the World Wide Web functionality, a familiarity with TCP/IP protocol suite, and Windows user skills.

## **Objectives:**

- Learn about the J2EE architecture for web applications
- Learn about J2EE technologies such as JDBC and DataSources, Servlets, JavaServer Pages, and Enterprise JavaBeans
- Apply the Java Servlet API version 2.3; and JavaServer Pages (JSP) API version 1.2
- Lean to interact with Enterprise JavaBean version 2.0
- Create a web application in WebSphere Studio Application Developer

#### Topics:

- Web Application Architecture
- Web Servers
- J2EE Overview
- WebSphere Studio Workbench Overview
- JDBC and DataSources
- Servlets and Servlet APIs
- Session Management
- Robust Controller Design
- Servlet Filters and Listeners
- JavaServer Pages
- JSPs with JavaBeans
- XML Syntax in JSPs
- Using JSP Custom Tags
- Creating JSP Custom Tag Libraries
- Web Application Design and Implementation with Struts
- J2EE Services
- Introduction to EJBs

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

SW222 - IBM WebSphere Multi-Platform Config

#### Course Code: SW222 US/ ECIS

Learn how to perform the following tasks for the configuration of an enterprise application: assembly, installation, security, manageability, performance, reliability, and scalability of the application server and its interaction with Hypertext Transfer Protocol (HTTP) servers, database servers, and other servers in the network, including the Lightweight Directory Access Protocol (LDAP) server.

This course utilizes Windows 2000, AIX and Solaris platforms. Work in teams of three-four individuals where each team has a pool of machines on which to configure and run WebSphere Application Server Advanced Edition v4.0.

#### Audience:

Programmer, Administrators who install, configure, and manage Web-based applications on WAS-AE.

#### **Prerequisites**

You should complete:

- Administration of WebSphere Application Server (Advanced Edition) (WF381) or
- Administration of WebSphere Application Server (Advanced Edition) (SW246)

## Key topics

- Installation of WebSphere Application Server Advanced and Single Server Editions on Solaris, AIX and Windows
- WebSphere Application Server architecture
- WebSphere Application Server and Java 2 Platform, Enterprise Edition (J2EE), including how WebSphere Application Server AE v4.0 maps to the J2EE specification
- Enterprise Application Assembly and Installation
- Advanced XML Configuration topics
- Advanced WebSphere Control Program (WSCP) topics
- WebSphere Security (including Roles, Role Mapping, Security Constraints, Method Permissions, LDAP, Enabling SSL, Single Sign-On and Accessing Secured Applications with a Java Application
- Workload Management (including TCP/IP spraying, Server Group/Clone configuration, Enterprise JavaBeans (EJB) Workload Management, Session Management and Firewalls)

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

## SW232 - Introduction to Java using IBM WebSphere Studio Application Developer

Course Code: SW232 US/ECIS

**Duration: 4.0 Days** 

### Overview:

This course covers the Java programming language and WebSphere Studio Application Developer Java Integrated Development Environment. Students are introduced to the fundamental concepts of the Java programming language including the language syntas and core class libraries, such as I/O, String classes, and collections.

#### Audience:

Programmer, Administrators who install, configure, and manage Web-based applications on WAS-AE.

#### Prerequisites

You should have software programming or application development experience.

## **Objectives**

After satisfactorily completing this course, you should be able to:

- Build projects, packages, and classes using WebSphere Application Developer
- Use the Application Developer browsers and help utility to explore the JDK documentation and browse class libraries
- Debug with Application Developer
- Handle exceptions and test your code
- Use Java collection classes
- Use serialization, streams and threads
- Use the code management in Application Developer

#### Topics:

- Best practices for Java code development
- Effective use of the IBM WebSphere Studio Application Developer tool

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

SW234 - Advanced EJB Development with IBM WebSphere Tools

Course Code: SW234 US/ ECIS

**Duration: 3.0 Days** 

Overview:

This course covers the advanced Enterprise Java Beans (EJB) topics. The process of creating and testing of EJBs in the WebSphere Studio Application Developer environment is discussed.

#### Audience:

Advanced Java programmers

#### **Prerequisites**

Knowledge of object-oriented programming concepts, the Java language and VisualAge for Java IDE is assumed.

## Objectives:

- Develop and test EJBs using IBM WebSphere Studio Application Developer
- Mapping CMP fields to database tables
- Complex Mapping, Association and EJB Inheritance
- Deploy EJBs to IBM WebSphere Application Server Advanced Edition
- Use Application Developer remote agent controller
- EJB Best Practices

#### Topics:

- Building and testing EJBs with IBM WebSphere Studio Application Developer
- Deploying to IBM WebSphere Application Server
- EJB usage patterns and best practices

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

## SW235 -WebSphere Studio Application Developer V5 for J2EE

Course Code: SW235 US/ ECIS

**Duration: 5.0 Days** 

#### Overview:

This course will explore IBM WebSphere Studio Application Developer 5.0 and will unveil component enhancements in J2EE 1.3 such as Message Driven Beans and the scenarios in which they can be used effectively. While the lecture sections explore the concepts, the lab exercises will guide you through WebSphere Studio Development environment to strengthen the concepts and to assist you in utilizing the tool.

#### Audience:

This course is suitable for those who want to become acquainted with WebSphere Studio Application Developer 5.0, and it requires previous familiarity with J2EE 1.2 and/or WebSphere Studio version 4.x with strong Java programming skills.

#### **Prerequisites**

Object-oriented analysis and design skills Familiarity with HTML Knowledge about webservers Strong Java Programming knowledge

Familiarity with J2EE 1.2 or WebSphere Studio Application Developer version 4

## **Objectives**

After satisfactorily completing this course, you should be able to:

- Build projects, packages, and classes using WebSphere Application Developer
- Use the Application Developer browsers and help utility to explore the JDK documentation and browse class libraries
- Debug with Application Developer
- Handle exceptions and test your code
- Use Java collection classes
- Use serialization, streams and threads
- Use the code management in Application Developer

#### Topics:

- Best practices for Java code development
- Effective use of the IBM WebSphere Studio Application Developer tool

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

## WA243/ - WebSphere Commerce V5.4 System Administration

Course Code: WA243 (CD ROM)

**Duration: 10 Hours** 

#### Overview:

WebSphere Commerce V5.4 provides the framework for creating and maintaining business-to-consumer and business-to-business e-commerce sites. WebSphere Commerce 5.4 has a Java based open architecture that uses WebSphere Application Server to enable Java technologies, such as Enterprise Java Beans (EJB) and

JavaServer Pages (JSP). Get technical WebSphere Commerce training and learn to understand complex system administration concepts and techniques.

#### Audience:

System administrators and webmasters of e-commerce sites using WebSphere Commerce V5.4.

### Prerequisites:

Administration of WebSphere Application Server V4.x (Advanced Edition) (WF38,WF381) or have experience administering WebSphere Application Server V4.0 Advanced Edition

IBM WebSphere Commerce V5.4 Fundamentals Guide - Product Manual

## Objectives:

After completing this course, you will be able to:

- Describe system administration tasks and tools
- Describe requirements for installation
- Describe how to install WebSphere Commerce and its related software
- Describe how to configure WebSphere Commerce instances in single-tier or multiple-tier environments
- Describe how to use WebSphere Commerce logs to troubleshoot Describe how to load a store from a store archive
- Describe how to load store data from supplied Extensible Markup Language (XML) load files
- Describe how to create organizations and administrators Describe how to set access control policies
- Describe how to analyze and tune a site
- Describe how to cleanup obsolete data from the WebSphere Commerce database

#### Course Delivery:

This course is structured as a CBT/WBT Self Study format.

## WA24 - WebSphere Commerce V5.4 System Administration

Course Code: WA24 WW, WA241 US

**Duration: 4 Days** 

#### Overview:

Learn the framework for creating and maintaining business-to-consumer and business-to-business e-commerce sites. WebSphere Commerce Version 5.4 has a Java

based open architecture, using WebSphere Application Server to enable Java technologies such as Enterprise Java Beans (EJB) and JavaServer Pages (JSP). Get technical WebSphere Commerce training and understand complex system administration concepts and techniques.

### Audience:

System administrators and webmasters of e-commerce Web sites using WebSphere Commerce V5.4 and IBM Business Partners who want to be certified in IBM WebSphere Commerce 5.4 Implementation.

## Prerequisites:

Administration of WebSphere Application Server V4.x (Advanced Edition) (WF38,WF381) or have experience administering WebSphere Application Server V4.0 Advanced Edition IBM WebSphere Commerce V5.4 Fundamentals Guide - Product Manual

## Objectives:

- Describe system administration tasks and tools
- Describe requirements for installation
- Describe how to install WebSphere Commerce and its related software
- Describe how to configure WebSphere Commerce instances in single-tier or multiple-tier environments
- Describe how to use WebSphere Commerce logs to troubleshoot
- Describe how to load a store from a store archive
- Describe how to load store data from supplied Extensible Markup Language (XML) load files
- Describe how to create organizations and administrators
- Describe how to set access control policies
- Describe how to analyze and tune a site
- Describe how to configure caching of store pages
- Describe how to cleanup obsolete data from the WebSphere Commerce database
- Describe how to configure and use a staging server
- Describe how to configure Payment Manager for a store
- Describe how to configure messaging, rule services and scheduled jobs for a store
- Describe how to configure security options

#### Contents:

- System administration overview and installation
- Configuring and troubleshooting WebSphere Commerce
- Managing stores and store data
- Member management and access control

- Store administration tasks Site maintenance and tuning
- Configuring payment manager
- Configuring security options Advanced configurations

## **Course Delivery:**

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

## WebSphere Sales 101

Course Code: WS101 This online course is not currently available

#### Overview

WebSphere 101 is the first layer of sales education in the WebSphere Power Brand Sales Roadmap for IBM Business Partners. It introduces the IBM WebSphere portfolio of products at a high level, discusses strategy and implementation, how the products work together, how to beat the competition, and most importantly, how you can make more money by leveraging the strength of IBM!

This one-day sales workshop provides you with a practical approach to selling the individual products and offerings that are part of the WebSphere portfolio. The focus will be on identifying opportunities, understanding typical WebSphere sales scenarios, how to move deals successfully through the sell cycle, product benefits, competitive differentiates, pricing, sales resources and customer references. Special focus is placed on how to work with IBM and how to leverage additional sales with IBM's WebSphere SMB Offerings.

## Who Should Take These Workshops

To attend, you must meet the following criteria:

- Your firm must be an active Premier or Advanced level Business Partner in PartnerWorld for Software.
- Your firm must also have one or more certifications from these product areas:
  - WebSphere Application Server
  - WebSphere Commerce Suite
  - VisualAge
  - MQSeries
  - WebSphere Host Integration

## What you are taught

This online course is not currently available.

- North America, view the WebSphere Sales 101 NA Schedule and Enrollment Web site in the Sales Education section of the Business Partner Zone.
- All other geographies, please either call your Membership Centre or contact your IBM representative.

Top Contributor Business Partners and Business Partners with a Value Package have priority enrollment.

#### Class Details

Delivery Method: On-line Cost: Free

#### WebSphere Sales 201

Course Code: WS201 This online course is not currently available

#### Overview

WebSphere 201 is the third layer of sales education in the WebSphere Power Brand Sales Roadmap for IBM Business Partners. The WebSphere 201 is a one-day, interactive sales workshop based on IBM's Signature Selling Method, and is designed to educate Business Partners on sales opportunities in the IBM WebSphere SMB Solution offerings:

- Leverage the Web
- Customer Loyalty
- Integrate and Extend

The purpose of the workshop is to excite and enable Business Partners to recognize a qualified WebSphere opportunity, develop a solution with the customer and quickly close the sale. The expectation from your participation in this workshop is that you will use your knowledge to successfully sell and install IBM WebSphere solutions in your accounts.

#### Who Should Take This Course

To attend, you must meet the following criteria:

- Your firm must be an active Premier or Advanced level Business Partner in PartnerWorld for Software.
- Your firm must also have one or more certifications from these product areas:

- WebSphere Application Server
- WebSphere Commerce Suite
- VisualAge
- MQSeries
- WebSphere Host Integration

## What You Are Taught

To view the objectives and agenda for the WebSphere 201 workshop, view the WebSphere Sales 201 class overview on the WebSphere Innovation Connection Online Web site.

From this Web site, you can also download the presentations covered in the workshop. If you prefer to take class notes, we encourage you to print the presentations and bring them with you to class.

## **Prerequisites**

The required prerequisites are the WebSphere Sales 101 workshop and the Signature Selling Method (SSM) workshop.

#### How to enroll

For schedules and enrollment information in:

- North America, view the WebSphere Sales 201 NA Schedule and Enrollment Web site in the Sales Education section of the Business Partner Zone.
- All other geographies, please call your Membership Centre or contact your IBM representative.

Top Contributor Business Partners and Business Partners with a Value Package have priority enrollment.

## **Class Details**

Duration: One day Delivery Method: Online

Cost: Free

## OB75 - Visual Programming with VisualAge for Java

Course Code: OB75 WW, OB75A US, OB75C Canada

**Duration: 4.5 Days** 

## Overview:

After completing this course, experienced Java developers will be able to develop GUI programs visually using the visual composition facility of VisualAge for Java. This course focuses on using the Integrated Development Environment (IDE), the Visual Composition Editor to develop Java Foundation Classes (JFC), and Abstract Window Toolkit (AWT) applications and applets. The course also covers the basics

of the JavaBeans component model and the use of the Select Bean as a way to prototype applications that access data from a relational database. Hands-on labs are used throughout the course.

## Audience:

This course is a lab intensive offering for experienced Java developers that want to use the visual composition facilities of the IBM VisualAge for Java product to develop GUI applications and applets.

## Prerequisites:

Before attending this course, students should have:

- A strong working knowledge of the Java language and the basic packages of JDK 1.1.
- A working knowledge of the Internet and web technologies.
- Previous experience with Object Oriented Analysis and Design.

The Java and library skills can be developed by taking "Object Oriented Programming with Java" (OB72Y or OB79Y), followed by several months of experience with Java, or "Java Programming" (OB73Y or OB77Y), followed by programming experience with Java.

The Object Oriented analysis and design skills can be developed by taking "Practicing Object-Oriented Analysis and Design" (OB15Y), followed by several months of experience.

## Objectives:

After completing this course, experienced Java developers will be able to:

- Develop Java Foundation Classes (JFC) applications visually using the visual composition facility of VisualAge for Java.
- Use the Integrated Development Environment (IDE) to build Java classes.
- Learn the basics of the JavaBeans component model.
- Use the BeanInfo editor to develop JavaBeans.
- Use the Select Bean as a way to prototype applications that access data from a relational database.

## **Course Delivery:**

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

#### EBSE - e-business Sales Essentials

Course Code: EBSE

Duration: 8 Hours

#### Overview:

PartnerWorld and IBM e-business Sales Enablement are pleased to announce the availability of e-business Sales Essentials for Business Partners! This modular offering is now available online from IBM Web Lecture Services and has been designed exclusively

for IBM Business Partners. This powerful new offering features presentation slides, scripts and delivery by subject matter experts in e-business sales.

e-business Sales Essentials (eBSE) for Business Partners is the first of several new offerings being delivered to Business Partners to address your requirements for New Skills in New Markets for New Business! e-business Sales Essentials is recommended as the first step for building e-business solution skills, and is recommended in the introductory education in preparation for the IBM Certified for e-business - Solution Advisor exam.

#### **Course Contents:**

e-business Sales Essentials contains nine (9) modules addressing:

- e-business market overview and the e-business cycle
- IBM's e-business transformation
- Selling with the application framework for e-business
- Selling e-business server offerings
- Selling e-commerce, Customer Relationship Management (CRM), Supply Chain Management (SCM) and Business Intelligence (BI) solutions
- IBM Global Finance support for e-business solutions

#### Course Delivery:

This course is structured as a Web Based Self Study format.

## HP31 - Signature Selling Methodology Workshop

Course Code: HP31 WW, SSM4S (SSMBPUS1 Sell to) (SSMPPUS1

Sell Through) US, SSM4SC /Canada

**Duration: 2.0 Days** 

Audience:

Business partners

#### Prerequisites:

Prior sales experience

#### Objectives:

Upon satisfactorily completing this course, you should be able to:

- Align your selling activities with customer's buying process
- Identify the most powerful people in the customer organisation who can help you win
- Identify opportunities and link IBM solutions to customer business initiatives
- Qualify opportunities guickly and effectively

- Fill the pipeline with opportunities that are verified at each step in the sell cycle
- Influence your customer's buying vision to focus on the unique strengths of IBM
- Develop a winning competitive strategy for your opportunities
- Create value for your customer through your interactions

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## IN12 - e-business: Selling Workshop

Course Code: IN12 WW, B3005 US, B3005E Canada,

**Duration: 2.0 Days** 

#### Overview:

This workshop course builds on the consultative selling techniques learned in the Solution Selling Methodology Workshop, and focuses on applying these techniques in an e-business scenario. This workshop class uses a case study approach with extensive student participation, interaction, exercises, and role playing. Participants learn powerful techniques to identify opportunities, stimulate interest, qualify and create buying visions around e-business solutions, and to effectively manage the sales process.

#### Audience:

- AIM Sales Specialists
- SDM Sales
- Software Account Managers
- e-business Sales Specialists
- Other software sales specialists

## Prerequisites:

- Completed the e-business: Sales Essentials Course
- Completed Signature Selling Methodology Workshop

#### Objectives:

After attending the course, the student will be able to:

- Identify Application Framework for e-business opportunities for a specific account or in an assigned territory
- Create Application Framework for e-business reference stories that could be used for value propositions, stimulating interest and identifying opportunities
- Create and deliver value propositions that support the use of IBM's Application Framework for e-business and associated offerings

- Identify customer-critical business issues that could be addressed by IBM's Application Framework for e-business and the associated offerings
- Stimulate and generate interest for IBM's Application Framework for e-business and the associated offerings
- Create a desire for a solution that would address the customer's critical business issues based on the strengths of IBM's Application Framework for e-business and associated offerings
- Negotiate access to power
- Assess Application Framework for e-business competitive opportunities and select the appropriate sales strategy
- Change a customer's biased view of a competitive solution (for example, Microsoft DNA) to that of IBM's Application Framework for e-business using visioning techniques and differentiator lists
- Diagnose a customer's business problem that would lead to the acceptance of IBM's Application Framework for e-business and associated offerings
- Achieve qualification at every step of an Application Framework for e-business sales cycle
- Create and deliver value justifications that support the use of IBM's Application Framework for e-business and associated offerings
- Resolve concerns in order to secure customer commitment to IBM's Application Framework for e-business and associated offerings.

## **Course Delivery:**

This course is structured in an Instructor-led, Classroom format.

## EB90 - e-business Fundamentals

Course Code: EB90
Duration: 12 Hours

#### Overview:

This self-study Web book is designed to give professionals in the Information Technology marketplace the foundation to understand the underlying technologies, building blocks, and products that are needed to build e-business solutions including customer relationship management, e-commerce, enterprise application integration, supply chain management, and business intelligence.

#### **Audience**

This course is appropriate for individuals of any background.

#### **Prerequisites**

A general understanding of computers and business.

#### Objectives

After completing this course, you should be able to do the following:

- List the main e-business solutions and their characteristics
- Enumerate the main technologies underlying e-business solutions
- Identify the main building blocks in designing e-business solutions
- Show the flow of information through the Internet
- Describe the significance of the technology for e-business for TCP/IP technologies
- Describe the significance of the technology for e-business for HTML technologies
- Describe the significance of the technology for e-business for Java technologies
- Describe the significance of the technology for e-business for XML technologies
- Compare options for connecting to the Internet and how they affect business decisions
- List and define major e-business applications
- For major e-business solutions, describe what the problem is trying to address
- For major e-business solutions, identify which technologies and building blocks are key in addressing the solution
- For major e-business solutions, enumerate the components of a sample solution
- Enumerate the topic

#### Contents

- What is e-business?
- e-business Technologies
- e-business Building Blocks
- Customer Relationship Management (CRM)
- e-commerce solutions
- Enterprise Application Integration
- Supply Chain Management
- Business Intelligence

## **Course Delivery:**

This course is structured as a Web Based Self Study format.

## IN74 e-business Fundamentals

Course Code: IN74 WW, N3102 US, EB890CE Canada,

**Duration: 2 Days** 

Overview:

This course covers at an overview level the practical application of Internet technologies to the development of e-business applications.

#### Audience

This course is appropriate for individuals of any background.

#### **Prerequisites**

A general understanding of computers and business.

## Objectives

After completing this course, you should be able to do the following:

- Identify the components of the Internet
- Differentiate between Internets, intranets, extranets, and the Internet
- Show the flow of information through the Internet
- Analyze a URL and understand Internet addressing and naming schemes
- Compare options for connecting to the Internet and how they affect businesses
- Select an Internet business-interaction model: HTML forms, CGI, or Java
- Transform a physical business into an e-business
- Create, advertise, and promote an e-business
- Evaluate the challenges and benefits of e-business
- Identify the key components of a firewall
- Show how encryption is used to secure data on the Internet

#### Contents

- The three-tier structure of e-business
- The Internet and its components: World Wide Web, e-mail, ftp, usenet, and telnet
- Networks: Internets, intranets, extranets, the Internet
- Internet communications: TCP/IP
- Internet naming and addressing: URLs, IP addresses, domains, DNS
- Internet connectivity: modem, T1, ISDN, cable, ADSL, satellite
- e-business interaction models: HTML forms, CGI, Java
- e-business fundamentals: advertising, promotion, legal concerns

e-business challenges and benefits

- Design your own e-business
- Security: firewalls and encryption

## **Course Delivery:**

This course is structured in an Instructor-led. Classroom format.

#### IN21 - Application Framework for e-business: Technology Workshop

Course Code: IN21 WW, B3106 US, B3106E Canada,

**Duration: 5.0 Days** 

#### Overview:

This five-day workshop develops product and technology skills across the entire range of Framework middleware and tools. The technology workshop covers the technical skills needed to integrate Web technologies and IBM products in the development of Framework based solutions. An e-business scenario is used through out the week to put all information in context. Students will gain hand's on experience with most of the technologies and products that make up the Framework in extensive labs that complement the lectures.

#### Audience:

This course is open to IBMers, Lotus and Tivoli employees, and IBM Business Partners only. The audience for this workshop is software technical sales and services professionals who have been identified by their management to lead and/or implement end-to-end Application Framework based solutions. The target audience includes:

- Technical Sales
  - A&IM Field Technical Sales Specialist (FTSS)
  - SDM Technical professionals
  - Software I/T Architect
  - Client I/T Architect
  - Proof of Concept Specialist
  - Advanced Technical Support (ATS)
  - Techline
- Services
  - I/T Architect
  - I/T Specialist

#### Prerequisites:

No prerequisites but recommended preparation consist of the following:

- Application Framework for e-business: An Introduction Self-Study (B3000 available in Global Campus)
- A&IM Education Track at the e-business University Required Knowledge:
- Skill level 3 on Windows NT, Windows 95, Windows 98
- Ability to use WordPad or Notepad on Windows
- Basic programming skills

#### Objectives:

By the conclusion of this course you should be able to:

- Describe the Framework, why and how to use it in designing Client Solutions
- Explain how the e-business software portfolio maps to the Framework
- Explain how to integrate technologies to create Framework solutions
- Describe hands-on experience with IBM software products that map into the Framework
- Use WebSphere Development Studio, NetObjects Fusion and VisualAge for Java to create a web site, Applets, JavaBeans and Servlets
- Use WebSphere Application Server to register and protect resources
- Use JDBC and Net.Data to access a DB2 Database
- Configure MQ Series message queues and complete a Java Applet linking MQ to a CICS system
- Use various host access mechanisms such as CICS TerminalServlet, CICS Client, and CICS Transaction Gateway

#### Course Contents:

- Introduction to the Framework
- Introduction to Business Scenario
- Java Overview (Applications, Applets, Servlets, JavaBeans, Enterprise JavaBeans, Components)
- Servers (Apache, HTTP Server, WebSphere Application Server(WAS))
- Application Development Tools (WebSphere Development Studio, VisualAge for Java, NetObjects Fusion)
- Web Server Interaction
  - Client Driven User Interface (Applets, Cascading Style Sheets, XML)
  - Server Driven User Interface and WAS APIs (Servlets, Java Server Pages)
- Underlying Web Technology
- Introduction to Connectors
- RDB Connectivity (Net.Data, JDBC)
- Message Oriented Middleware (MQ Series)

- Transaction Monitoring (TXSeries)
- Distributed Objects (RMI, CORBA)
- Enterprise Integration for Domino (DECS, LEI, LSX, ...)
- E-Commerce
- Web Application Infrastructure
  - Security
  - Directory
  - Performance
- Designing Integrated Web Applications

## Course Delivery:

This course is structured in an Instructor-led, Classroom format.

## IN23 - e-business: Designing Integrated Solutions Workshop

Course Code: IN23 WW, P3206 US, P3206E Canada,

**Duration: 4.5 Days** 

#### Overview:

Develop the architecture and design skills required to apply the IBM Framework for e-business to customer environments, choose the specific products, understand the trade-offs between various solutions and develop a reasonable design for the customer. **IMPORTANT NOTICE:** 

Prior to enrolling in this course, please review this series of self assessment questions. If you are able to respond appropriately to these questions, then you have the background and experience recommended for participation in this course. If you are unable to respond appropriately, please do not enroll in this course, as it is not designed for you.

## **Self Assessment:**

- Describe the differences between Web Self Service (including Web Marketing, Customer Relationship Management, Online Sales) and Business Integration (including Enterprise
- Application Integration, Supply Chain Management, and Workflow Management) e-business solutions.
- How does the IBM Framework for e-business support building Web self-service and business integration e-business solutions?
- Describe the differences between Java applets, servlets, and Server Pages. How would these be used in developing e-business solutions?
- Describe three key products in the IBM Framework for e-business. How would these be used in developing e-business solutions?
- Describe the differences between JavaBeans and Enterprise JavaBeans (EJB) in the context of building e-business solutions. How are EJBs supported in the IBM Framework for e-business?

 Describe transactions and the Atomicity, Consistency, Isolation, and Durability (ACID) properties in the context of e-business solutions. How are transactions supported by products in the IBM Framework for e-business?

#### Who Should Take This Course:

This course is open to e-business application architects, designers, and developers.

#### Prerequisites:

There are two audiences for this course: one based on understanding the why of technology choices and products placement and one based on understanding the details of how the technologies and products work.

If you have a why requirement, you should have a general understanding of the e-business marketplace, conceptual knowledge of browsers, Hypertext Markup Language (HTML), Hypertext Transfer Protocol (HTTP), and legacy systems.

If you have a how requirement, you should complete:

e-business Technology Workshop (B3106) or have equivalent experience and knowledge with the following technologies and products used within the IBM Framework for e-business:

## Web marketing:

- HTTP. HTML. Java. Web servers
- WebSphere Studio and IBM HTTP servers

Customer relationship management with data access:

- Web application servers, client versus server driven interactions, Extensible Markup Language (XML), performance issues
- IBM Web application servers (WebSphere Standard, Domino), IBM Performance Pack

#### Online sales:

- Enable an online shopping process with secure payments, product catalogs, orders and customer management
- IBM WebSphere Commerce Suite and IBM Payment Manager
- Customer relationship management with transactions:
- EJB / Common Object Request Broker Architecture (CORBA) and transaction processors and monitors
- WebSphere Advanced Edition, WebSphere Enterprise Edition (TX Series, ComponentBroker)
- Supplier integration:
- Business Integration technologies (enterprise application integration, Business Integration with XML)
- IBM Message Queuing Series (MQSeries), MQSeries Integrator (MQSI), Domino (Agents)
- Supplier integration and workflow:
- Workflow technology

- MQSeries workflow, Domino (agents and workflow)
- You should also have experience in how to architect a solution.

## What You Are Taught:

By the end of this course, you will have or be able to:

- Describe the underlying technologies for building e-business solutions
- Describe the products and components in the IBM Framework for e-business and their use in building e-business solutions
- Describe competing products and components
- Use IBM Intellectual Capital in designing e-business solutions:
- Process for designing solutions
- Patterns that describe reusable solutions
- Best practices in designing solutions

Define e-business requirements by understanding business needs Design a solution using IBM Framework for e-business to address e-business requirements:

- Develop architectural alternatives with selected products/components
- Choose an alternative based on pros and cons and trade-offs
- Recommend a solution

#### **Topics Include:**

- Communicating a design
- Designing e-business solutions overview
- Web Marketing Solution Space
- Security review
- Customer relationship management
- Customer relationship management with transactions support
- Supplier integration
- Enterprise application integration
- Business Intelligence (BI) and Knowledge Management (KM)
- Online sales

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format

## MQ82 - MQSeries Technical Introduction (CD-ROM Course)

Course Code: MQ82

Duration: 6.0 Hours

#### Overview:

This CD-ROM course describes the MQSeries of products, their functions and use. It is designed both as an introductory course in its own right and as a prerequisite course to the other, more technically specific courses.

#### Audience:

Customers and IBM technical personnel wishing to find out more about MQSeries and its queue managers

## Prerequisites:

Before taking this course, users should have previous technical experience in working with software. Skills and experience in one or more of the following specific areas will enable users to derive more benefit from the course.

- Communications and networking
- System and network management
- System design
- Application development
- Transaction processing
- Data base
- Client/server solutions
- Platform knowledge (IBM and non-IBM)
- Open systems

#### Objectives:

At the end of this course, users should be able to:

- Compare and contrast MQSeries with other forms of program to program communication.
- Identify the major impacts of MQSeries on application design.
- List the platforms on which MQSeries is supported.
- Describe the basic components and structure of MQSeries (e.g. a message, a queue, a queue manager, a channel etc.).
- Describe the function of each of the calls in the Message Queue Interface (MQI)
- Describe the tasks that need to be performed in order to manage a queue manager and its connections with other queue managers and with MQSeries client applications.
- Describe the transactional support within MQSeries.
- Describe those features of MQSeries that contribute to system security.
- Explain how MQSeries can be used as part of the communications infrastructure to connect application environments such as Lotus Notes, the World Wide Web, and enterprise transaction and data base systems.

#### **Course Contents:**

MQSeries Technical Introduction is a modular, self-paced computer-based training course covering the following MQSeries Topics:

- Introduction to MQSeries
- Programming with MQSeries The Calls
- Programming with MQSeries The Details
- Intercommunication
- System Administration
- Transactional Support
- Security
- Linking and Bridging with MQSeries

## Ordering the Course:

- If you are an IBMer but not part of Learning Services, call your local education department.
- If you are an IBM Customer please contact IBM Learning Services.

## Course Delivery:

This course is structured as a computer-based course.

Simulations and hands-on exercises give you the opportunity to practice what you learn.

## MQ01 - A Technical Introduction to MQSeries

Course Code: MQ01 WW, MQ010 US, MQ011 Canada,

**Duration: 1.0 Day** 

#### Overview:

This course is designed to provide a technical introduction to MQSeries.

#### Audience:

Technical personnel who wish to find out more about MQSeries.

#### Prerequisites:

Before taking this course, you should have previous technical experience in working with software. Skills and experience in one or more of the following specific areas will enable you to derive more benefit from the course.

- Communications and networking
- System and network management
- System design
- Application development

- Transaction processing
- Data base
- Client/server solutions
- Platform knowledge (IBM and non-IBM)
- Open systems

## Objectives:

At the end of this course, you should be able to:

- Compare and contrast MQSeries with other forms of program-to-program communication.
- · Identify the major impacts of MQSeries on application design.
- · List the platforms on which MQSeries is supported.
- Describe the basic components and structure of MQSeries (for example, a message, a queue, a queue manager, a channel, etc.).
- Describe the function of each of the calls in the Message Queue Interface (MQI).
- Describe the tasks that need to be performed in order to manage a queue manager and its connections with other queue managers and with MQSeries client applications.
- · Describe the transactional support within MQSeries.
- Describe those features of MQSeries that contribute to system security.
- Explain how MQSeries can be used as part of the communications infrastructure to connect application environments such as Lotus Notes, the World Wide Web, and enterprise transaction and data base systems.

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

#### MQ05 - MQ Application Programming

Course Code: MQ05 WW, MQ052-MQ056 US, MQ056 Canada,

**Duration: 2.0 Days** 

#### Overview:

Through lecture and hands-on labs, this course teaches application programmers how to use the MQI (Message Queue Interface). MQSeries provides this consistent programming interface on a wide range of IBM and non-IBM platforms; the course applies to all MQSeries platforms.

In addition to class notes, student will each receive a copy of the following booklet:

MQSeries Application Reference Summary

#### Audience:

The course is intended for application designers and application programmers who are intending to build applications using MQSeries.

## Prerequisites:

- Completion of the MQSeries Technical Introduction (MQ01) or MQ90 Knowledge or an introductory knowledge of MQSeries by some other means.
- Experience in application programming on a platform supported by MQSeries.
- · experience of designing application programs
- experience of writing programs in one of the languages supported by the MQM

## Objectives:

On successful completion of this course, the participant will be able to:

- Design, write and test programs which use the MQI
- Understand the key elements of program design necessitated by the message queuing paradigm.

## **Course Content:**

- Message queuing in programs
- Attributes of queues and messages
- MQI in different environments
- MQSeries object types as well as MQI calls and options
- Programming for a mixed network
- Assured delivery and transactions
- Time independent programming and triggers
- Parallel applications

There are practical exercises in MQI programming.

#### Comments:

This update adopts the MQ83Y structure to our classroom course:

- MQ05 will teach the basic MQI as available on all platforms.
- MQ06 will teach advanced topics such as Msg groups, segmentation etc.

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

MQ15 MQSeries System Administration

Course Code: MQ15 WW, MQ151-MQ155 US, MQ15C Canada,

**Duration: 3.0 Days** 

#### Overview:

To provide the basic skills required by an administrator for any of the MQSeries Level 2 queue managers except MQSeries for OS/390. Specifically, the queue managers covered by this course are as follows:

- MQSeries for AIX
- MQSeries for AT& T GIS UNIX
- MQSeries for Digital OpenVMS AXP
- MQSeries for Digital OpenVMS VAX
- MQSeries for HP-UX
- MQSeries for OS/2 Warp
- MQSeries for AS/400
- MQSeries for SINIX and DC/OSx
- MQSeries for SunOS
- MQSeries for Sun Solaris
- MQSeries for Tandem NonStop Kernel
- MQSeries for Windows
- MQSeries for Windows NT

### Audience:

Technical personnel who require the skills to be an administrator for any of the MQSeries Level 2 queue managers except MQSeries for OS/390 or to provide support to others performing this task.

#### Prerequisites:

The course assumes a knowledge of MQSeries to the level covered by MQ01Y - A Technical Introduction to MQSeries. The participant should also be reasonably familiar with, and be able to invoke simple function within, the operating system environment used for the practical exercises. A basic knowledge of how SNA LU6.2, TCP/IP, or NetBIOS is configured would be advantageous.

#### Objectives:

After attending the course, the participant should be able to:

- Plan the implementation of MQSeries on a selected platform
- Install MQSeries
- Perform simple customization and administration tasks
- Enable a gueue manager to exchange messages with another
- Enable a gueue manager to support an MQSeries client
- Implement basic restart/recovery procedures
- Perform basic problem determination

#### Course Contents:

- A Review of MQSeries
- Installation and Configuration
- The MQI and Triggering
- Robust Messaging
- Distributed Queue Management
- More on Distributed Queuing
- MQSeries for Windows

In theory, the practical exercises may be done using any of the queue managers covered by the course. In practice, however, the systems for a specific class will depend on the equipment available.

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## MQ83 - MQSeries Application Programming (CD-ROM Course)

Course Code: MQ83

Duration: 16.0 Hours

#### Overview:

This computer-based self-study course teaches the basic skills of designing and writing business programs which issue calls to the Message Queue Interface (MQI).

## Audience:

Experienced business application programmers who need to develop programs using MQSeries.

## Prerequisites:

- Basic understanding of the concepts of messaging and queuing model and how this is implemented in MQSeries (completion of the MQ82Y course).
- Experience of application programming in C or COBOL.

#### Objectives:

Upon completion of this course, learners will be able to:

- Describe the Message Queue Interface (MQI)
- Design and write programs to use the MQI as implemented on the chosen platform

- Explain the differences in program design necessitated by the messaging and queuing paradigm
- Describe, in detail, the different MQI calls
- Explain the differences in the MQI across the different MQSeries platforms

#### **Course Contents:**

- Major Calls (Housekeeping)
- Major Calls (Messaging and Queueing)
- Remote Queueing
- Manipulating Message Delivery
- Minor Calls (Syncpoint Control Calls)
- Minor Calls (MQINQ and MQSET Calls)
- Message Groups, Segmentation and Reference Messages

#### Course Delivery:

This course is structured in a CBT, Self-study format.

## MQ84 - MQSeries System Administration (CD-ROM Course)

Course Code: MQ84

Duration: 12.0 Hours

## Overview:

This computer-based self-study course provides an excellent introduction to MQSeries System Administration, which is platform independent. In 12 hours study time you will learn much about the implementation of the messaging and queueing concepts in MQSeries.

#### Audience:

Technical personnel who wish to acquire the basic technical information required by an administrator for the MQSeries Level 2 queue managers.

#### Prerequisites:

The course assumes a knowledge of MQSeries to the level covered by A Technical Introduction in MQSeries, course-codes MQ01 or MQ82.

#### Objectives:

After the course the student should be able to:

- Describe each of the administration interfaces provided by MQSeries
- List some MQSeries control commands and describe their function

- Describe the tasks that may need to be performed to prepare a queue manager for use by a business application
- Describe the tasks that need to be performed to enable a queue manager to exchange messages with another queue manager
- Describe the tasks that need to be performed to enable a queue manager to support an MQSeries and explain the differences necessary in program design
- Describe the structure of the MQSeries log and how it enables recovery of different MQI calls
- Describe where to look for MQSeries error messages MQSeries
- Use MQSeries reference

#### **Course Contents:**

MQSeries System Administration is a modular, self-paced computer-based training course covering the following MQSeries topics:

- Installation and configuration, as well as The MQI and triggering
- Robust messaging, and Distributed gueue management
- MQSeries for Windows, and MQSeries System Administration

## Course Delivery:

This course is structured as a computer-based self-study course.

#### MQ70 - Application Design with MQSeries

Course Code: MQ70 WW, MQ700 US, MQ70C Canada,

**Duration: 2.5 Days** 

## Overview:

This course discusses the use of MQSeries functions and capabilities and how to apply these MQSeries characteristics to the program design. Topics include Data Analysis, Selective message processing, triggers MQI Clients, data conversions and channel exits, and event messages. Sources for code examples are discussed, including a download of source code from the MQSeries Support Pacs and review of the code. technologies and how to integrate them to build a solution.

Class paper exercises are used as reinforcements for the discussion topics. It is assumed that students are aware of MQSeries coding techniques and practices prior to attendance in this class.

#### Audience:

This course is designed for anyone who is experienced in the use of MQSeries and has responsibility for the design, development, and the implementation of an enterprise solution that involves MQSeries. It is one of the recommended steps to be completed in the path leading to qualification as an MQSeries Certified Application Developer.

## Prerequisites:

The student should be generally self-sufficient, that is, able to perform tasks at the following level with limited assistance from peers, product experts, and documentation.

- Experience and expertise in one or more MQSeries supported programming languages.
- MQSeries experience in programming and implementing its basic functions and facilities
- Ability to translate an external design into an internal design.
- Understand distributed application design concepts.
- Experience in implementing software across multiple platforms.
- Ability to describe processes used for transaction management and commit control.

## Objectives:

at the conclusion of this course you should be able to:

- Recommend appropriate design that implements messaging and queuing functions, based on a high level design
- Implement the design, producing an application solution that is fully tested and functionally complete
- Incorporate any system type applications that will contribute to the overall success of the project

## **Course Delivery:**

This course is structured in a lecture/lab format.

The hands-on sessions form a vital, integral part of the course.

## MQ66 - MQIntegrator Workshop

Course Code: MQ66 WW, MQ660 US, MQ66C Canada,

**Duration: 5.0 Days** 

#### Overview:

Provide an introduction to the workings of MQIntegrator.

#### Audience:

System administrator, system programmers.

#### Prerequisites:

none

#### Objectives:

By the satisfactory conclusion of this course, you will have been provided with 'an introduction to MQIntegrator'.

## Certification and Training Quick Reference Guide

## **Course Content:**

- History of MQIntegrator
- Features
- APIs

#### Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## MQ070 - MQSeries Connections for Domino

Course Code: MQ070 US, MQ07 WW

**Duration: 2.0 Days** 

#### Overview:

To provide a technical overview and practical introduction to the tools that exist for integration between Lotus Domino and enterprise applications using MQSeries (and CICS):

- MQSeries link LotusScript Extension (MQLSX)
- MQSeries Enterprise Integrator for Lotus Notes (MQEI)
   To provide an overview of the current and emerging enterprise integration capabilities from Lotus.

## Audience:

Technical Professionals including Consultants, Systems Integrators and Service Providers, who have a requirement to integrate Domino and the Web with enterprise applications.

## Prerequisites:

To obtain maximum benefit from the class, students must already have MQSeries and Lotus Notes application development skills. The required skills can be obtained by attending:

- MQSeries Technical Workshop (MQ15Y)
- Lotus Notes R4 Application Development 1 (LN455Y)
- Some familiarity with LotusScript (or VisualBasic) is also recommended.
   This course will NOT teach basic MQSeries or Lotus Notes skills.

#### Objectives:

On completion of this course, students will:

- Understand the concepts behind these tools
- Have practical experience of installing the MQLSX and MQEI
- Have experience of programming solutions with the MQLSX and MQEI

• Be able to implement a simple MQLSX or MQEI application

Be aware of the Lotus enterprise integration capabilities

#### Course Delivery:

This course is structured in a lecture/lab format. The hands-on sessions form a vital, integral part of the course.

MQ30 - MQSeries Advanced System Administration(Distributed Platforms) <u>OR</u> MQ31 - MQSeries Advanced OS/390 System Admin

Course Code: MQ30 WW, MQ302 US, MQ30D Canada,

Course Code: MQ31 WW, MQ303 US, MQ30 WW

**Duration: 2.5 Days** 

#### Overview:

Learn the advanced skills required by an administrator for an MVS/ESA MQSeries Level 2 queue manager. This course is also available as *MQSeries Advanced System Administration (Distributed Platforms) (MQ302)*. This course helps you prepare for Certification Test 096, MQSeries System Planning and Design, to become an IBM Certified Solutions Expert - MQSeries.

#### Prerequisites:

You should have completed one of the following courses before enrolling in MQ303:

MQSeries System Administration (NT) (MQ15)

MQSeries System Administration (AIX) (MQ15)

MQSeries System Administration (AS/400) (MQ15)

MQSeries System Administration (Sun Solaris) (MQ15)

MQSeries for OS/390 System Administration (MQ20)

or have equivalent experience. Practical experience in working with MQSeries is

recommended.

#### **Audience**

Technical personnel who require the skills to be an administrator for MVS/ESA MQSeries Level 2 queue manager, or to provide support to others performing that function.

#### Objectives:

Configure message channels and MQI channels and manage them effectively Discuss the implementation of a dead letter queue handler

Discuss the implementation aspects of security in a distributed queuing environment Understand the scope of automated function that is now available to support the management of a MQSeries network

Implement a MQSeries SupportPac

#### **Course Content**

Introduction
Managing Message Channels
Managing MQI Channels and Channel Security

Performance and Tuning
Managing a MQSeries Network

## MW30 - IBM MQSeries Workflow V3.2 Modeling and API

Course Code: MW30 WW, MW300 US, MQ30C Canada,

**Duration: 5.0 Days** 

#### Overview:

This course is designed to provide a fundamental overview of MQSeries Workflow. Students will build a complete business process model using the Buildtime interface and deploy it into the MQSeries Workflow Runtime environment. Concepts covered will include the definition of workflow staff, staff assignment to tasks, control flow, transition conditions, registration of workflow programs and definition of required data structures. Students will also gain skills in the administration of the MQSeries Workflow Runtime environment using the Administration Utility. Finally, the course will provide extensive discussions of the MQSeries Workflow APIs (C and C++, with some discussion of ActiveX). Topics will include writing a MQSeries Workflow program including the reading and writing of container data, designing an custom workflow client and the handling of process instances and worklists.

#### Audience:

Individuals who need to work with MQSeries Workflow Version 3. These include:

- Process analysts and designers
- Workflow solution specialists
- Designers of application development environments which use workflow management techniques
- Users of the MQSeries Workflow Buildtime
- · Project leaders in a workflow project
- MQSeries Workflow administrators
- Individuals interested in gathering in-depth knowledge of the product architecture, settings and the tuning mechanism of the product
- MQSeries Workflow Application Designers and Programmers

## Prerequisites:

You should have the following skills and knowledge prior to attending this class:

- A basic understanding of workflow concepts or process automation
- Experience in developing business application programs
- Competency in C or C++

## Objectives:

After successfully completing this course, you should be able to:

- Understand the concepts and architecture of MQSeries Workflow
- Model a business process using the Buildtime Client interface
- Use the maintenance and configuration of the Workflow servers
- Design and write a Workflow-aware application

#### **Course Contents:**

- MQSeries Workflow Overview
- Components and Fundamental Objects
  - Buildtime
  - Runtime
  - The API
- The Messaging Layer
- Installation and Configuration
- The Buildtime Component
- Introduction to Modeling
  - Process Models
  - Basic Connectors
- · Advanced Buildtime:
  - Advanced Connectors
  - Blocks and Sub-processes
- Administration
  - Execution Server
  - Administration Server
  - Scheduling Server Cleanup Server
  - Problem Determination
  - Audit Trail
- API Overview
- Activity Implementations
- Workflow Clients

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

#### MW50 - MQSeries Workflow for OS/390

Course Code: MW50 WW, MW500 US,

**Duration: 3.0 Days** 

## Purpose:

MQSeries Workflow, IBM's workflow manager, enables organisations to define, implement, track and continuously improve the processes most integral to their success. MQSeries Workflow links people, information, and applications to streamline business processes that deliver improved efficiency and increased responsiveness. MQSeries Workflow is part of IBM's strategic MQSeries product line. MQSeries Workflow is also part of IBM's EDMSuite (Enterprise Document Management), the portfolio of Web-enabled

## Audience:

Process analysts and designers, workflow solution specialists, designers of application environments that use workflow management technologies, project leaders in a workflow project, and workflow system architects, system administrators who require an introduction to the MQSeries Workflow for OS/390 environment

## Prerequisites:

You will benefit from prior understanding of concepts relating to:

- DB2 and other relational database subsystems
- MQSeries transactional messaging
- Process based system analysis and implementation

## **Objectives:**

By the satisfactory conclusion of this course, you should be able to:

- Understand the business problems that can be solved using workflow technology
- Architect a workflow-enabled application system using MQSeries Workflow for OS/390 server
- Build, import and execute a complete process model into MQSeries Workflow for OS/390 server
- Understand some internals of MQSeries Workflow for OS/390 server
- Connect MQSeries Workflow Client to S/390 Server

#### Course Contents:

Overview of MQSeries Workflow

- MQSeries Workflow for OS/390 Architecture
- Overview
- Server Framework
- Work Load Manager (WLM)
- RRS
- DB2 & MQSeries Setup Requirements
- MQSeries Workflow for S/390 Installation & Customization
- Buildtime for MQSeries Workflow for S/390 Server
- FDI
- Import to MQWF/390 Server Database
- S/390 Program Registration to Workflow
- Mapper & Mapping Data Language (MDL)
- NLS & Codepage Conversion
- MQSeries Workflow for S/390 Administration Server
- MQSeries Workflow for S/390 Program Execution Server (PES)
- CICS/IMS Program Invocation
- MQ-CICS/IMS Program Invocation
- User-defined Program Invocation
- MQSeries Workflow for S/390 APIs
- COBOL APIs for integration of host applications
- Differences with MQWF Workstation APIs
- MQSeries Workflow for S/390 Diagnosis
- MQSeries Workflow Client Connection

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Any hands-on sessions form a vital, integral part of the course.

## MQ35 - MQSeries MQSeries Adaptor Offering Technical Introduction

Course Code: MQ35 WW, MQ350 US,

**Duration: 1.0 Day** 

#### Purpose:

This course is designed to provide a technical introduction to the features available in the MQSeries Adapter Offering. We will discuss the MQSeries Adapter Kernel, MQSeries Adapter Builder, the Open Application Group standard definitions using XML, interaction with other MQSeries family products and the OS/400 RPG API Builder. This course provides the basic knowledge required prior to attending the MQSeries Adapter Offering Technical Workshop (MQ36).

This one day presentation class will give you a general overview of the IBM MQSeries Adapter Offering - what it is, what it does, how it works and how it will help you in the integration of applications.

#### Audience:

People interested in learning about the MQSeries Adapter Offering and technical people considering application integration involving MQSeries.

## Prerequisites:

A basic understanding of the concepts of messaging and queuing using MQSeries (which can be gained by attending - A Technical Introduction to MQSeries (MQ01) or equivalent experience). A basic understanding of the issues surrounding interfacing and application integration.

#### Objectives:

By the end of this course, the student should be able to:

- Identify and evaluate the functions of the MQSeries Adapter Offering
- Identify the MQAB (MQSeries Adapter Builder) its function and implementation
- Identify the MQAK (MQSeries Adapter Kernel) its function and how it is used to support the MQSeries Adapter Offering
- Explain how the OAG (Open Application Group) XML BOD (Business object Definitions) are used to create non application specific interfaces
- Identify which application adapters are available as part of the MQSeries Adapter Offering
- Evaluate the MQSeries Adapter Offering as an adjunct to other MQSeries family products.

## Course Delivery:

This course is structured in a lecture format.

## MQ36 - MQSeries MQSeries Adaptor Offering Workshop

Course Code: MQ36 WW, MQ360 US,

**Duration: 3.0 Days** 

#### Purpose:

This course provides an in-depth technical workshop of the features available in Message Queue Adapter Offering, Adapter Builder. The student will learn how to produce various integration adapters using the MQ Adapter Builder.

They will obtain an in-depth knowledge on how the MQ Adapter uses the MQ Adapter Kernel as an underlying API set to send and receive XML messages through MQSeries. These messages will be XML either based on the Open Application Group standard definition or just standard XML.

This three-day workshop will give you an in-depth knowledge of the IBM Message Queue Adapter Builder - what it is, what it does and how it works, and how it will help you in your integration of distributed and non distributed applications using open standards.

#### Audience:

People interested in learning about the MQSeries Adapter Offering and technical people considering application integration involving MQSeries.

## Prerequisites:

A basic understanding of the concepts of the messaging and queuing model and how that model has been implemented in MQSeries. This information can be gained from attending Technical Introduction to MQSeries (MQ01) or equivalent experience A basic understating of the MQSeries Adapter Offering Product This information can be gained from attending MQSeries Adapter Offering Technical Introduction (MQ35). A basic knowledge in building application integration integration integrates.

#### Objectives:

By the end of this course, the student should be able to:

- Install the MQAB tool on an NT workstation
- Construct and configure the MQAB repository UDB2,
- Import and build application definitions into the MQAB repository, both legacy and XML -eXtended Markup Language
- Develop mediation between an application and XML defined messages
- Develop mediation between an XML defined messages and an application API
   (Application Programming Interface)
- Build simple MQSeries gueues
- Configure MQSeries Adapter Kernel for NT
- Generate the Developed adapters
- Compile the adapters on NT.
- Maintain and modify Adapters from within the MQAB.

#### **Topics Covered:**

- In-depth overview to the MQSeries Adapter Offering MQAB tool
- Brief overview of the MQSeries Adapter Kernel (MQAK) environment
- Build application definition files and import application definition files
- Import XML DTD file definitions
- Build Legacy to OAG XML adapters
- Build XML to OAG XML adapters
- Build XML to XML adapters
- Build Legacy to Legacy adapters
- Generate and Compile MQAB Adapters
- Configure and Implement the Adapters into the MQAK

Maintain the Adapter from MQAB.

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

### CW700 - CrossWorlds

Course Code: CW700 US, WW CW200 + CW300+ CW310= CW700

**Duration: 10.0 Days** 

#### Overview:

Learn about the IBM CrossWorlds product and IBM CrossWorlds implementation methodology. The course consists of one week of formal training, followed by one week of hands-on case studies. Follow the life cycle of a project using IBM CrossWorlds' implementation methodology and design templates.

## Week One:

CW200 provides the foundation for the technical curriculum. Get a detailed theoretical understanding of the different components that make up the IBM CrossWorlds solution. CW300 focuses on concepts and procedures involved in modifying and customizing the IBM CrossWorlds implementation for a specific environment. You are given a business case in which you implement an IBM CrossWorlds solution. Through extensive lab work, you deploy connectors, define and create business objects, map data between business objects, configure collaboration objects and troubleshoot the implementation.

#### Week Two:

CW310 The second week of the course is an informal case study environment. Simulate an actual client engagement with the instructor playing the role of the client. Throughout the course, you interview the instructor to determine project scope, detailed requirements, and overall system design. Then you implement a system based on your design. IBM CrossWorlds consultants provide you with technical support and Questions and Answers (Q&A) throughout the course.

#### Audience:

Consultants who plan to implement the IBM CrossWorlds product.

## Prerequisites:

An Enterprise Resource Planning (ERP) or Enterprise Application Integration (EAI) consulting background, understanding of basic programming, and Java skills are beneficial. Any experience with databases or networks is also helpful.

## Objectives:

- Develop a project scope document
- Interview a client to develop design documents utilizing IBM CrossWorlds' design templates
- Work in a multideveloper environment, importing components of working repository
- Configure and connect the Siebel, Oracle, and Jtext connectors to their InterChange Server instances
- Build custom business objects, maps, and relationships
- Configure a complex collaboration object: Sales Order Processing with Customer Wrapper
- Unit test the Sales Order Processing Integration using IBM CrossWorlds tools

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

## CW800 - IBM CrossWorlds e-business Solutions

Course Code: CW800 US,

**Duration: 3.0 Days** 

#### Overview:

Learn how to implement IBM CrossWorlds e-business solutions. Examine various e-business technologies such as Extensible Markup Language (XML), Electronic Data Interchange (EDI) and Value-Added Networks (VANs), Security and Certificates, Java Servlets, and trading partner management. Discuss transport mechanisms, such as Hypertext Transfer Protocol (HTTP), HTTP/Secure (HTTP/S), File Transfer Protocol (FTP), Simple Mail Transfer Protocol (SMTP), and MQSeries. Also discuss CrossWorlds e-business solutions technologies, such as Access Framework and Trading Partner Interchange (TPI). Install, configure, and implement an Access Framework solution. Create and exchange trading partner profiles with self-signed certificates and trade documents using TPI. Also, use xmlborgen and EDIFECS SpecBuilder and explore XML standards, such as Commerce XML (cXML), XML Common Business Library (xCBL), and Electronic Business XML (ebXML).

## Audience:

Functional and technical consultants and developers

#### Prerequisites:

Complete CW700

#### Objectives:

- Introductions to IBM CrossWorlds E-Business and Trading Partner Interchange (TPI)
- TPI Installation and Security Define and discuss E-Business fundamentals
- Explain Internet security basics: Encryption, Hashing, Digital Signatures and Certificates, firewalls, etc.
- Understand how TPI Tracker monitors the TPI system Understand how to install and configure the TPI connector Review the major components for the Access Framework architecture
- Describe the use of data handlers
- Review Server Access Interface and how it is used to make an external call

## Course Delivery:

This course is structured in an Instructor-led, Classroom format. Hands-on sessions form a vital, integral part of the course.

#### Start Now Sales 201

IBM Start Now Solutions provide IBM Business Partners with all the technical and sales tools needed to begin selling repeatable solutions consisting of their high-value services and industry-leading IBM software from the brands customers trust: DB2, Lotus, Tivoli and WebSphere. The Start Now 201 Sales course provides students with an understanding of the IBM Start Now Solutions for e-business and Start Now Solutions Proven applications. Students will learn the basic functions and features provided by each solution as well as the tools and materials they can use to generate leads, create interest, and close business. Students will also learn about IBM Start Now Solutions that include line-of-business applications developed by Independent Software Vendors (ISV).

The Start Now solutions are designed specifically for your SMB customers and prospects. The solutions are:

- IBM Start Now Business Integration Solutions
- IBM Start Now Business Intelligence Solutions
- IBM Start Now Collaboration Solutions
- IBM Start Now Content Management Solutions
- IBM Start Now e-commerce Solutions

- IBM Start Now Infrastructure Solutions
- IBM Infrastructure Management Solutions
- IBM Start Now Portal Solutions
- IBM Start Now Wireless Solutions
- IBM Start Now Start Now Solutions Proven

#### Who should take this course

This course is designed for sales representatives working for IBM Business Partners who want to leverage the repeatable solutions in Start Now as a foundation for success selling a repeatable solution. IBM Business Partners interested in selling solutions designed specifically to meet the IBM Value Advantage Plus incentive solution requirements should also take this course.

## What you are taught

The purpose of this course is to enable Business Partners to learning the Start Now solutions, how to recommend the right solution to your customers, and to quickly close the sale. The expectation from your participation in this workshop is that you will use your knowledge to successfully sell Start Now offerings in your accounts.

## **Prerequisites**

There is no prerequisite for the Start Now 201 workshop. We do recommend, however, that you take one or more <u>IBM Software Sales 101</u> workshops.

#### How to enroll

For schedules and enrollment information in:

- North America, view the <u>IBM Software Cross-Brand Sales Roadshow</u>
   Web site in the Sales training section of the Business Partner Zone.
- All other geographies, please call your Membership Centre or contact your IBM representative.

## Course details

Duration: One day

Delivery method: Classroom

Cost: Free

Linux Sales

Training is being updated.

## **Certification/Training Planner**

Candidate Information	Date Plan Initiated:
Name:	Location:
Department:	Manager:
Certification Goals	Target Date: (mm:yy)
1	
2	
3	

	Skills Needed	Current Skill Level	Target Skill Level	Target Date:
1				
2				
3				
4				

## **Accepted Technical Certification Roles for PartnerWorld for Software Level Attainment**

Visit the PWSW BP Zone (training and certification link) for the most current list of Accepted Certifications

DB2 Information Management	Accepted technical certification roles for PartnerWorld for Software level attainment
Content Management	IBM Certified Solutions Expert - IBM Content Management OnDemand Multiplatform
	IBM Certified Solutions Expert - IBM Content Management OnDemand iSeries
	IBM Certified Solutions Designer- DB2 Content Manager V8
Data	IBM Certified Database Associate - DB2 Universal Database V 8.1 Family
	IBM Certified Specialist - DB2 UDB V6/V7 User
	IBM Certified Advanced Database Administrator - DB2 Universal Database V8.1 for Linux, Unix & Windows
	IBM Certified Database Administrator - DB2 UDB V8.1 for Linux, Unix & Windows
	IBM Certified Solutions Expert - DB2 UDB V7.1 Database Administration for UNIX, Windows and OS/2
	IBM Certified Solutions Expert - DB2 UDB V7.1 Database Administration for OS/390
	IBM Certified Solutions Expert - DB2 UDB V7.1 Family Application Development
	IBM Certified Application Developer - DB2 Universal Database V8.1 Family
	IBM Certified Solutions Expert - Business Intelligence Note: Will no longer count toward level attainment withdrawal date is 12/31/03.
	IBM Certified Solution Designer - Business Intelligence V8.1
	IBM Certified Advanced Technical Expert - DB2 - DRDA
	IBM Certified Advanced Technical Expert - DB2 for Clusters
	IBM Certified Advanced Technical Expert - DB2 Data Replication
	IBM Certified Solutions Expert - U2 Uni-Data V5.2 Administrator
	IBM Certified Solutions Expert - U2 Universe V9.6 for Unix and Windows
	IBM Certified Solutions Expert - U2 Family Application Development

Informix

IBM Certified Solutions Expert - Red Brick Warehouse V6 System Administrator

IBM Certified Solutions Expert - Informix Dynamic Server V7 System Administrator IBM Certified Solutions Expert - Informix Dynamic Server V9 System Administrator

IBM Certified Solutions Expert - Informix 4GL Developer

Lotus

# Accepted technical certification roles for PartnerWorld for Software level attainment

Lotus - for Domino

## Certified Lotus Specialist for Domino:

IBM Certified Associate Developer - Lotus Notes and Domino 6 (New Title)
Certified Lotus Specialist - IBM Lotus Domino 6 Application Developer

IBM Certified Associate System Administrator - Lotus Notes and Domino 6 (New Title)

Certified Lotus Specialist - IBM Lotus Domino 6 System Administrator

## **<u>Certified Lotus Professional</u>** for Domino Application Development:

Certified Lotus Professional Domino R5 Application Developer

Certified Lotus Professional Domino R5 Principal Application Developer

Certified Lotus Instructor Application Development R5

IBM Certified Application Developer - Lotus Notes and Domino 6 (New Title)

Certified Lotus Professional IBM Lotus Domino 6 Application Developer

IBM Certified Advanced Application Developer - Lotus Notes and Domino 6 (New Title)

Principal CLP IBM Lotus Domino 6 Application Developer

Note: See bottom of this section for Notes Domino 6 certification paths

## <u>Certified Lotus Professional</u> for Domino System Administration:

Certified Lotus Professional Domino R5 System Administrator

Certified Lotus Professional Domino R5 Principal System Administrator

Certified Lotus Instructor System Administrator R5

IBM Certified System Administrator - Lotus Notes and Domino 6 (New Title)

Certified Lotus Professional IBM Lotus Domino 6 System Administrator

IBM Certified Advanced System Administrator - Lotus Notes and Domino 6 (New Title)

Principal CLP IBM Lotus Domino 6 System Administrator

Note: See bottom of this section for Notes Domino 6 certification paths

## Certified Lotus Specialist for Collaborative Solutions:

IBM Certified Associate Developer - Lotus Workflow 3 (New Title)

Certified Lotus Specialist - Developing Applications Using Lotus Workflow 3

Certified Lotus Specialist - Administering Sametime 2.0

IBM Certified Associate System Administrator - Sametime 3.0 (New Title)

Certified Lotus Specialist - Administering Sametime 3.0

IBM Certified Associate System Administrator - QuickPlace 3 (New Title)

Certified Lotus Specialist - Administering QuickPlace 3

IBM Certified Associate System Administrator - Domino.Doc 3.0 (New Title)

Certified Lotus Specialist - Domino.Doc System Administration 3.0 IBM Certified Associate Developer - Lotus Domino.Doc 3.0 (New Title)

Certification and Training Quick Reference Guide

**Lotus - for Collaborative Solutions** 

Certified Lotus Specialist - Domino.Doc 3.0 Customization IBM Certified Associate System Administrator - Lotus Discovery Server 1.0 (New Title) Certified Lotus Specialist - Implementing Lotus Discovery Server 1.0 IBM Certified Associate Developer - Lotus QuickPlace 3 (New Title) Certified Lotus Specialist - Instant Collaborative Applications with Lotus QuickPlace 3 Certified Lotus Specialist - Developing Web Applications in Sametime 2 IBM Certified Associate Developer - Lotus Sametime 3 (New Title) Certified Lotus Specialist - Developing Web Applications in Sametime 3

## **Certified Lotus Professional for Collaborative Solutions:**

IBM Certified Application Developer - Lotus Collaborative Solutions (New Title)
Certified Lotus Professional - Collaborative Solutions Application Developer
IBM Certified Advanced Application Developer - Lotus Collaborative Solutions (New Title)
Principal CLP - Collaborative Solutions Application Developer
IBM Certified System Administrator - Lotus Collaborative Solutions (New Title)
Certified Lotus Professional - Collaborative Solutions System Administrator
IBM Certified Advanced System Administrator - Lotus Collaborative Solutions (New Title)
Principal CLP - Collaborative Solutions System Administrator

Lotus - for Lotus Instructor

IBM Certified Instructor - Lotus Notes and Domino 6 Application Development (New Title)
IBM Certified Instructor - Lotus Notes and Domino 6 System Administration (New Title)
Certified Lotus Instructor ND6

Notes Domino 6 Certification Paths

Note: Rational certification roadmap information is located on a <u>business partner only</u> website within the Rational website and is password protected. You must be a Rational business partner to gain access.

Rational	Accepted technical certification roles for PartnerWorld for Software level attainment
	IBM Rational Consultant - TeamTest 2002 and 2003
	IBM Rational Consultant - Performance Testing 2002 and 2003
	IBM Rational Consultant - Rational Unified Process 2002 and 2003
	IBM Rational Consultant - Requirements Management w/Use Case 2002 and 2003
	IBM Rational Consultant - Object Oriented Analysis and Design 2002 and 2003
	IBM Rational Consultant - ClearQuest 2002 and 2003

IBM Rational Consultant - ClearCase UNIX 2002 and 2003

IBM Rational Consultant - ClearCase UCM for UNIX 2002 and 2003

IBM Rational Consultant - ClearCase UCM for Windows 2002 and 2003

IBM Rational Consultant - ClearCase Windows 2002 and 2003

IBM Rational Consultant - ClearCase MultiSite UNIX 2002 and 2003

IBM Rational Consultant - ClearCase MultiSite UCM UNIX 2002 and 2003

IBM Rational Consultant - ClearCase MultiSite UCM Windows 2002 and 2003

IBM Rational Consultant - ClearCase MultiSite - Windows 2002 and 2003

IBM Rational Consultant - Performance Testing

IBM Rational Consultant - Test Management & Robot

IBM Rational Consultant - Test Management & XDE Tester

<u>Tivoli</u>	Accepted technical certification roles for PartnerWorld for Software level attainment
Security	Tivoli Certified Consultant - IBM Tivoli Access Manager for Business Integration V3.8.1* *Note: Formerly Policy Director for MQSeries
	<u>Tivoli Certified Consultant - IBM Tivoli Access Manager for e-business V3.9</u> * *Note: Formerly Tivoli Policy Director V3.8
	IBM Certified Deployment Professional Tivoli Risk Manager V4.1 Note: Formerly Tivoli Certified Consultant IBM Tivoli Risk Manager V4.1
	Tivoli Certified Consultant - Tivoli SecureWay User Administration V3.7
	<u>Tivoli Certified Solutions Expert - IBM SecureWay Firewall for Windows NT</u> <u>Tivoli Certified Solutions Expert - IBM SecureWay Firewall for AIX</u>
	Tivoli Certified Consultant Tivoli Public Key Infrastructure V3.7.1
	IBM Certified Deployment Professional Tivoli Privacy Manager for e-business V1.1
	Tivoli Certified Consultant -Tivoli NetView 6.0* <u>Tivoli Certified Consultant - Tivoli Enterprise Console 3.8 Network Management</u> *Note: The above NetView 6.0 certification in this section has been replaced by Enterprise Console 3.8 Network Management
Configuration and Operations	Tivoli Certified Consultant - Tivoli Workload Scheduler V7.0  IBM Certified Deployment Professional Tivoli Workload Scheduler V8.2  *Note: The above Workload Scheduler V7.0 certification in this section is being replaced by Workload Scheduler V8.2.

<u>Tivoli Certified Consultant - Tivoli Inventory V4.0</u>

Tivoli Certified Consultant - Tivoli Software Distribution V4.1

IBM Certified Deployment Professional -- Tivoli Configuration Manager V4.2

Performance & Availability

<u>Tivoli Certified Consultant - Tivoli Enterprise Console V3.7</u>

Tivoli Certified Consultant - Tivoli Netview 6.0\*

IBM Certified Deployment Professional -- Tivoli Enterprise Console V3.8 Network Management

\*Note: The above Netview 6.0 certification is being replaced by Tivoli Enterprise Console V3.8 Network Management.

Tivoli Certified Consultant - Tivoli Distributed Monitoring V3.7\*

IBM Certified Deployment Professional -- Tivoli Monitoring V5.1.1 \* # New role name

Note: The above V3.7 certification in this section has been replaced with the V5.1.1 version.

IBM Certified Deployment Professional -- Tivoli Enterprise Console V3.8 Event Management

Tivoli Certified Consultant -- Tivoli Storage Manager V4.1\*

Storage IBM Certified Deployment Professional - IBM Tivoli Storage Manager V5.1 Implementation

\*Note: The above V4.1 certification has been replaced with the V5.1 version.

IBM Certified Deployment Professional -- Tivoli Storage Resource Manager V1.2

<u>Tivoli Certified Enterprise Consultant - Tivoli Enterprise V3.7 Implementation</u>

WebSphere	Accepted technical certification roles for PartnerWorld for Software level attainment
VisualAge for Java	IBM Certified Specialist - IBM VisualAge for Java, Professional Edition, V4 IBM Certified Developer - IBM VisualAge for Java Professional Edition V4
	IBM Certified Developer - XML and Related Technologies V1
Host Integration	IBM Certified Specialist - Host On-Demand Implementation* *Note: The above certification will no longer count for PWSW level attainment after June 30, 2003.  IBM Certified Specialist IBM WebSphere Host On-Demand V6.0 Implementation
	IBM Certified Specialist - IBM WebSphere Host Publisher
SecureWay	IBM Certified Specialist - SecureWay Communication Server for OS/2 WARP

IBM Certified Specialist - SecureWay Communication Server for AIX

IBM Certified Specialist - SecureWay Communication Server for Windows NT

IBM Certified Solutions Expert - IBM WebSphere Voice Response for AIX

Voice Systems IBM Certified Solutions Expert - IBM WebSphere Voice Response for Windows

IBM Certified Solutions Expert - IBM WebSphere Voice Server for IBM WebSphere Voice Response

WebSphere IBM Certified Solutions Expert - IBM WebSphere Studio, Professional or Advanced Edition, V4.0

IBM Certified Specialist - IBM WebSphere Application Server, Advanced Single Server Edition for Multiplatforms, V4.0 Note: WebSphere and Java\*\* based IBM Certified Enterprise Developer - IBM WebSphere Application Server, Advanced Single Server Edition for Multiplatforms, V4.0 Note: WebSphere and Java\*\*

based

IBM Certified Systems Expert - Administration for IBM WebSphere Application Server, Advanced Edition, V4.0

IBM Certified Specialist - IBM WebSphere Studio Application Developer for Windows, V4.0.3

IBM Certified Solution Developer - IBM WebSphere Studio Application Developer for Windows, V4.0.3

IBM Certified Associate Developer -- WebSphere Studio V5.0
IBM Certified Solution Developer -- WebSphere Studio V5.0
IBM Certified Enterprise Developer -- IBM WebSphere Studio V5.0

IBM Certified System Administrator - WebSphere Application Server V5.0

Note: The V4.0.3 certifications in this section are being replaced by the V5.0 certifications.

IBM Certified Advanced System Administrator -- WebSphere App Server V5.0 Multi-platform Administration

IBM Certified Solution Developer - IBM WebSphere Portal for Multiplatforms, V4.1, Implementation

WebSphere Commerce IBM Certified Solutions Expert - IBM WebSphere Commerce Suite, V5.4, Customization

IBM Certified Specialist - IBM WebSphere Commerce, Business Edition V5.4, Implementation

IBM Certified Specialist - MQSeries Integrator

MQSeries IBM Certified Specialist - IBM WebSphere MQ Integrator\*

\*Note: Formerly known as MQSeries Integrator V2. MQSeries Integrator V2 certs will still be recognized for level attainment.

IBM Certified Specialist - MQSeries

IBM Certified System Administrator - WebSphere MQ V5.3 IBM Certified Solution Designer -- WebSphere MQ V5.3 IBM Certified Solution Developer -- WebSphere MQ V5.3

\*Note: The above IBM Certified Specialist - MQSeries in this section is being replaced by IBM Certified System Administrator - WebSphere MQ V5.3. Level attainment withdrawal date is pending for the IBM Certified Specialist - MQSeries certification.

IBM Certified Solutions Expert - MQSeries IBM Certified Developer - MQSeries

IBM Certified Solutions Expert - MQSeries Integrator

IBM Certified Solutions Expert - IBM WebSphere MQ Integrator\*

\*Note: This is only a name change from MQSeries Integrator V2. The certification content remains the same. MQSeries Integrator V2 certs will still be recognized for level attainment.

IBM Certified Solutions Expert - MQSeries Workflow

IBM Certified Specialist -- MQSeries Adapter Offering V1

CrossWorlds IBM Certified Solutions Expert - IBM WebSphere CrossWorlds V4.0

e-business (Initiative	Accepted technical certification roles for PartnerWorld for Software level attainment
	for PartnerWorld for Software level attainment

IBM Certified for e-business -- Solution Designer V2 IBM Certified for e-business - Solution Designer

IBM Certified for e-business - Solution Technologist

## **Accepted Sales Skills**

Segment/Initiative	Accepted Sales Mastery Tests/Skills for PartnerWorld for Software Level Attainment
e-Business	IBM Certified for e-business - Solution Advisor (Test 814)
WebSphere	WebSphere Solution Sales Professional (Test M125)
Tivoli	Tivoli Solution Sales Professional (Test M119)
DB2 Data Management	Data Information Management Solution Sales Professional (M111)
Lotus	Lotus Solutions Sales Professional (Test M115)
StartNow	StartNow Solutions Sales Professional (Test M133)