IBM Software Group

OMEGAMON V4.1 - Installation and Update

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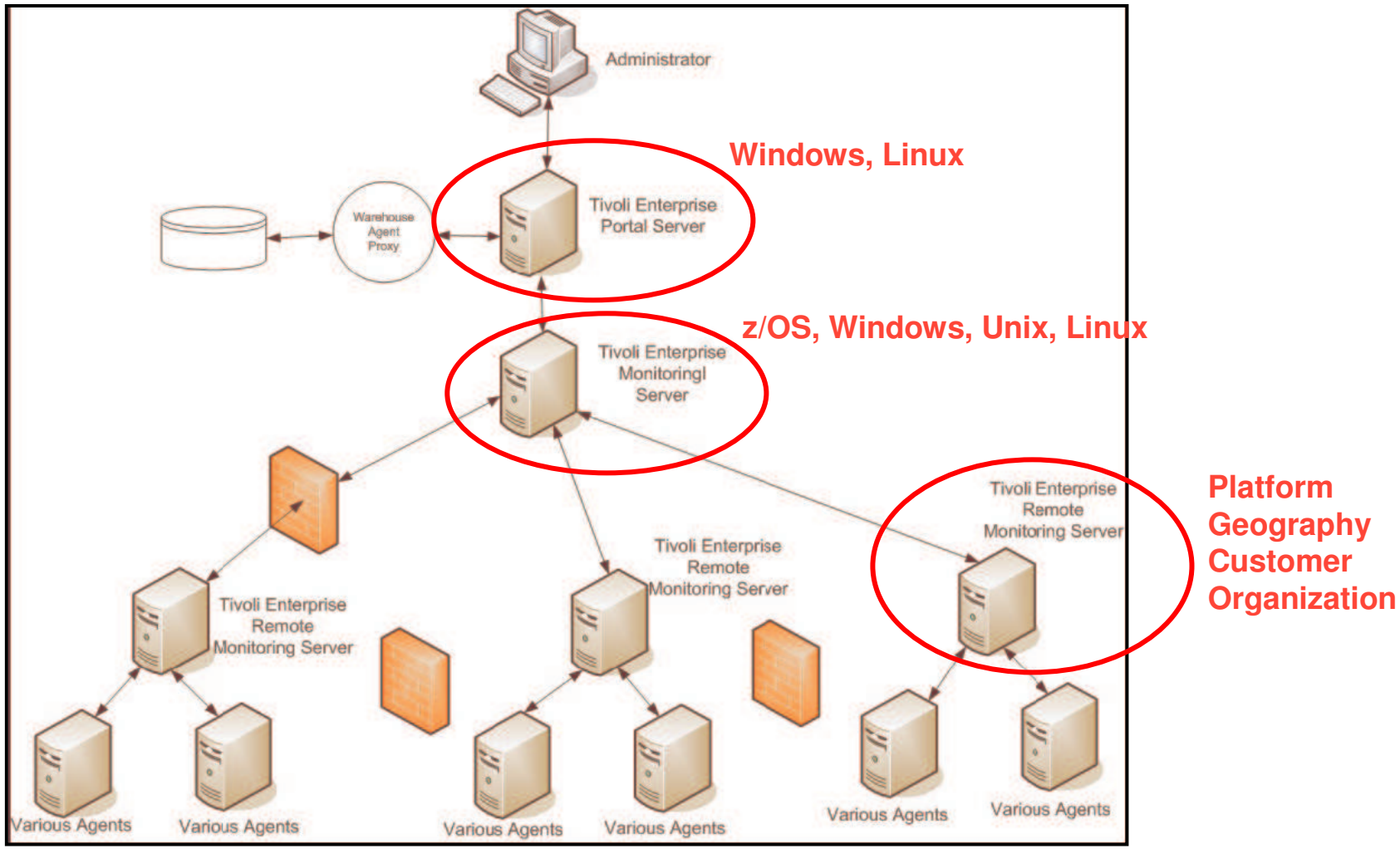
Tivoli software

ON DEMAND BUSINESS™

Agenda

- OMEGAMON Installation
- What have we learned !
- OMEGAMON XE Version 4
- Integration via TEP
- V 4.1 + SPE Update
- Summary

OMEGAMON Infrastructure



OMEGAMON Installation Challenges

- Organization
- Planning
- Find a server
- Security
- Installation
- Customization
- Product Quality Issue ?
- Choice of Interfaces

Organization

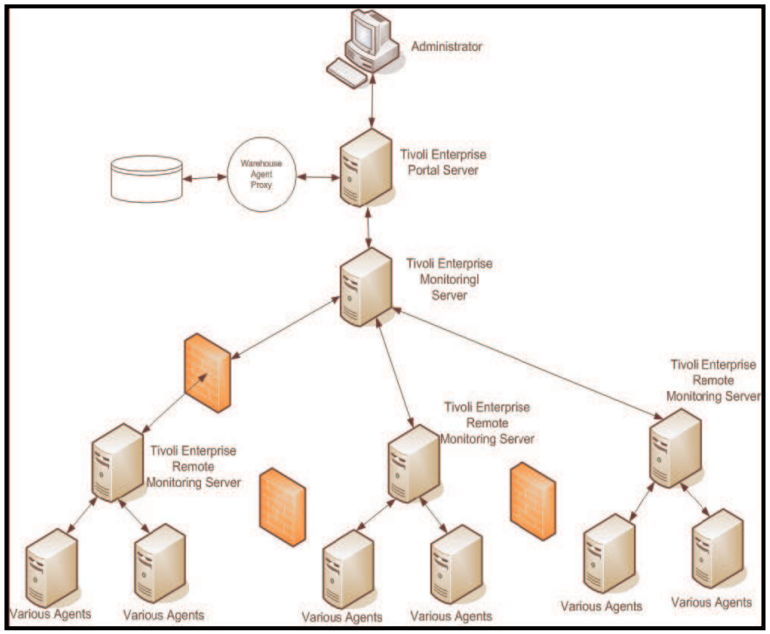
- This is cross platform
  - Covering: z/OS, Windows, AIX ?, Linux ?
- This is cross discipline
  - Systems programmer, security specialist, CICS specialist, database administrator, etc.
- Get commitment for participation
  - You need a Windows specialist !
- Get commitment for resources when needed
  - It is very difficulty to create a project plan with fixed time schedules
- Who is responsible for the OMEGAMON solution ?
  - The z/OS systems programmer ? The Systems Management group ?

Planning

- Identify the OMEGAMON team
- Conduct a planning workshop with all participants
- Define activities, responsibilities, co-operation
- Define time frame (be realistic – things take time !)
- Define environments (sysprog. test, functional test, system test, production)
- Define test activities (what need to be tested ?)
- Plan installation (migration from test environments to production)
- Plan operation (education of operators, etc.)

Find a server ?

- How many and which servers are needed ?
  - –Environments (sysprog. test, functional test, system test, production)
  - –Geography, Customers, Etc.
  - –TEPS, Hub TEMS, Remote TEMS, Database server
  - –Backup server
  - –Which platform
- Do you have a problem to get one server ?
- What about ten servers ?
  - –It can take several weeks !
- Must be included in time plan



Security

- OMEGAMON users must be defined in TEPS Security Database
  - Define user authorities
  - Validate user access (not user rights) via TEPS server
    - Against RACF if TEMS on z/OS
    - Against LDAP if TEMS on Windows
  - No standard solution to synchronize RACF and TEPS Sec. Database
  - Administration of OMEGAMON users at TEPS must be aligned with normal user administration
- Commands is issued with OMEGAMON User against Started Task – not with individual operator userid
  - Is that an issue ?
  - Shouldn't be - same approach is accepted with System Automation

Installation

- OMEGAMON 4.1 improvements
- Check maintenance level/PTF's across platform
  - Not only z/OS PTF level !
- SMP/E installation
- ICAT customization
- No cloning tool today – ICAT customization on each LPAR/system
  - Time consuming at large installations
  - Disk consuming (several copies)
- This issue has been raised
  - IBM DK is working on a cloning solution (short-term)
  - A request to improve the ICAT process in OMEGAMON (long-term)

TEP Customization

- OMEGAMON is delivered with IBM defined workspaces and thresholds
- Not sufficient for most installations
- Customization is needed
  - Thresholds
  - Situations -> Alerts -> Take actions
  - Policies (cross systems events)
  - Integration with TSA, TWS etc.
- Must include experts (both z/OS, CICS, DB2, etc. and Windows GUI skills)
- Using OMEGAMON Classic will require additional customization

Product Quality Issue ?

- OMEGAMON 3.1 Agents is running without problems (but many PTF's has been delivered)
- OMEGAMON 4.1 Agents is running without problems

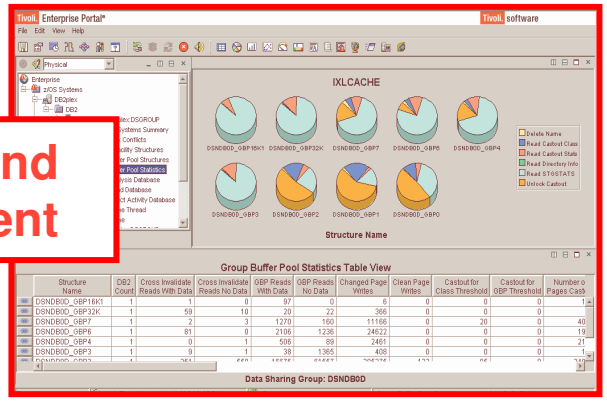
- OMEGAMON / ITM infrastructure (TEMS, TEPS) is running without problems from ITM 6.1 FP05
- Earlier ITM 6.1 could give problems

- With current releases and fix-levels there is no product quality issues !

OMEGAMON - Choice Of Interfaces

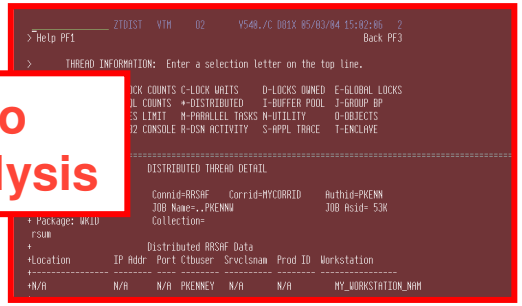
- **OMEGAMON XE GUI Interface**
  - Real time and historical
  - Automation & alerts – Situations & P
  - SysPlex level information (CF, n-wa
  - TEP integration

For Operation and Alert Management



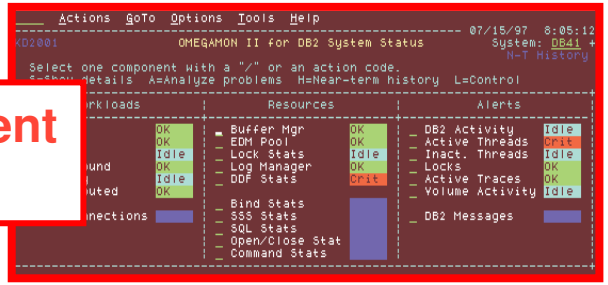
- **OMEGAMON Classic**
  - 3270 Interface comma
  - Real Time & Near Ter

For Experts to Detailed Analysis



- **OMEGAMON CUA**
  - 3270 interface
  - Real Time & Near Term Histo
  - Warning & Critical exception alerts

No new development but still supported



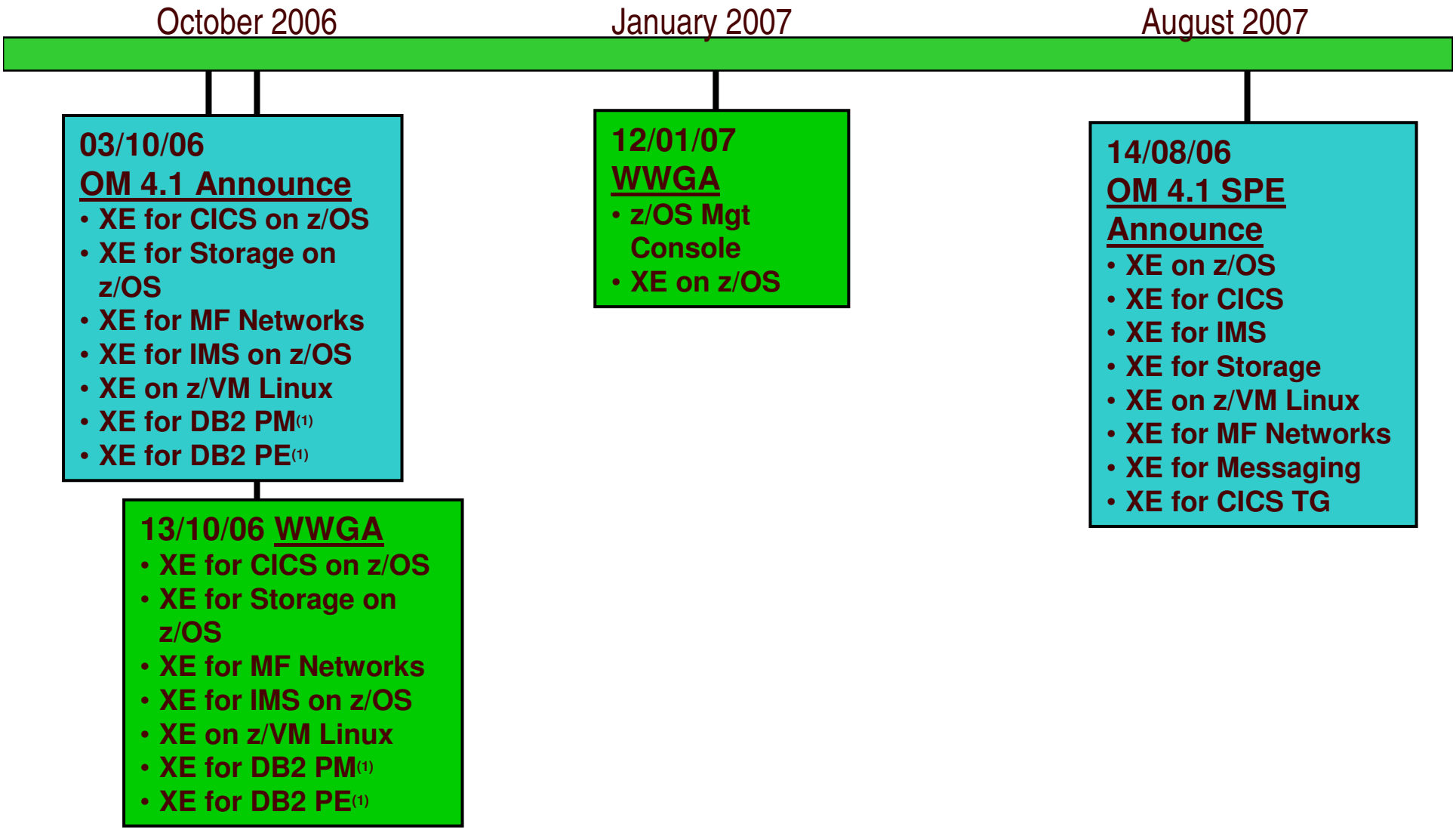
OMEGAMON Installation Challenges

- Organization – Yes a challenge
- Planning – Is an absolute requirement
- Find a server – Can take some time
- Security – Must be carefully handled
- Installation – Additional improvements in process
- Customization – Will always be installation specific
- Product Quality Issue ? – Not with current releases
- Choice of Interfaces – Your choice

Agenda

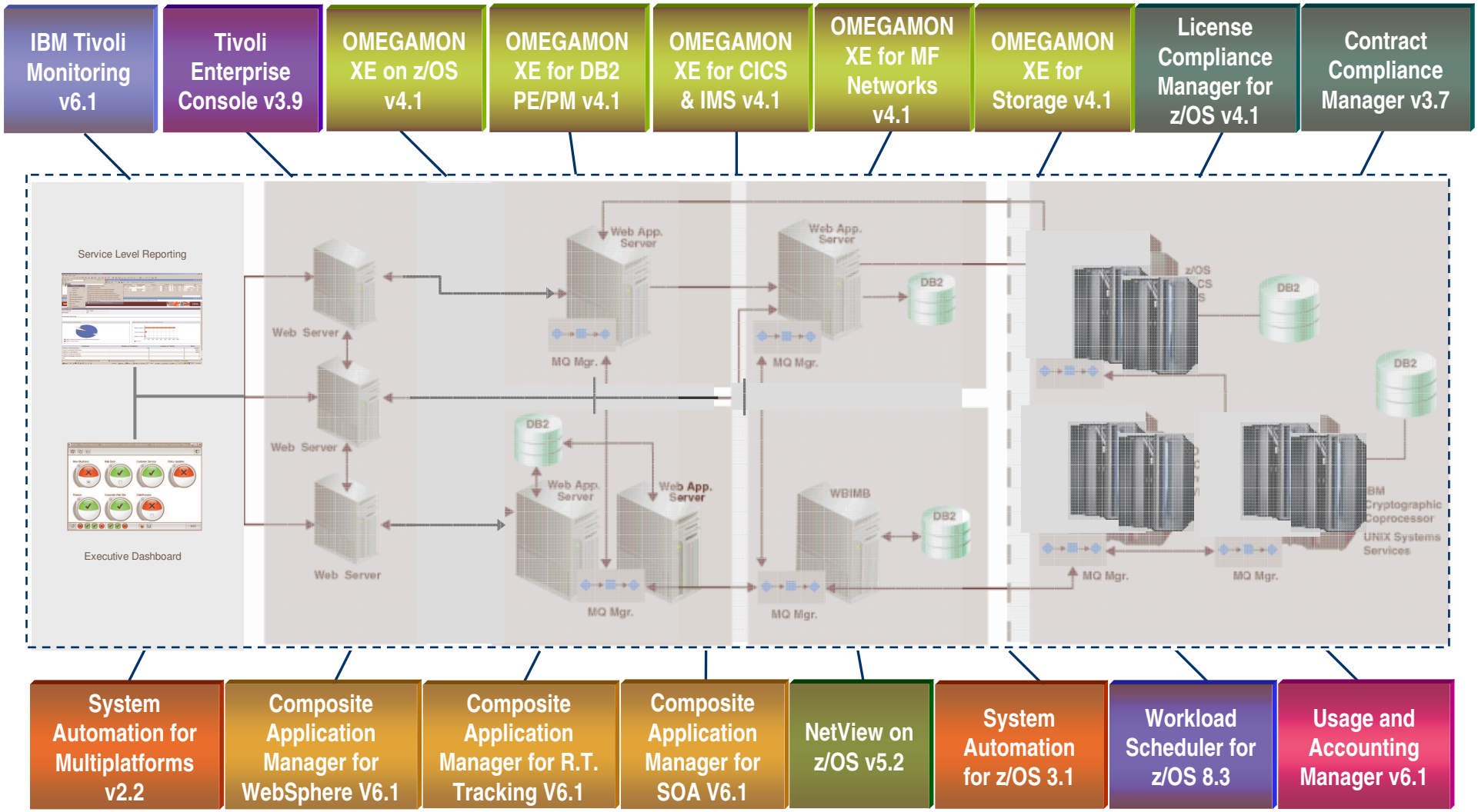
- OMEGAMON Installation
- What have we learned !
- **OMEGAMON XE Version 4**
- **Integration via TEP**
- **V 4.1 + SPE Update**
- Summary

What's Coming When



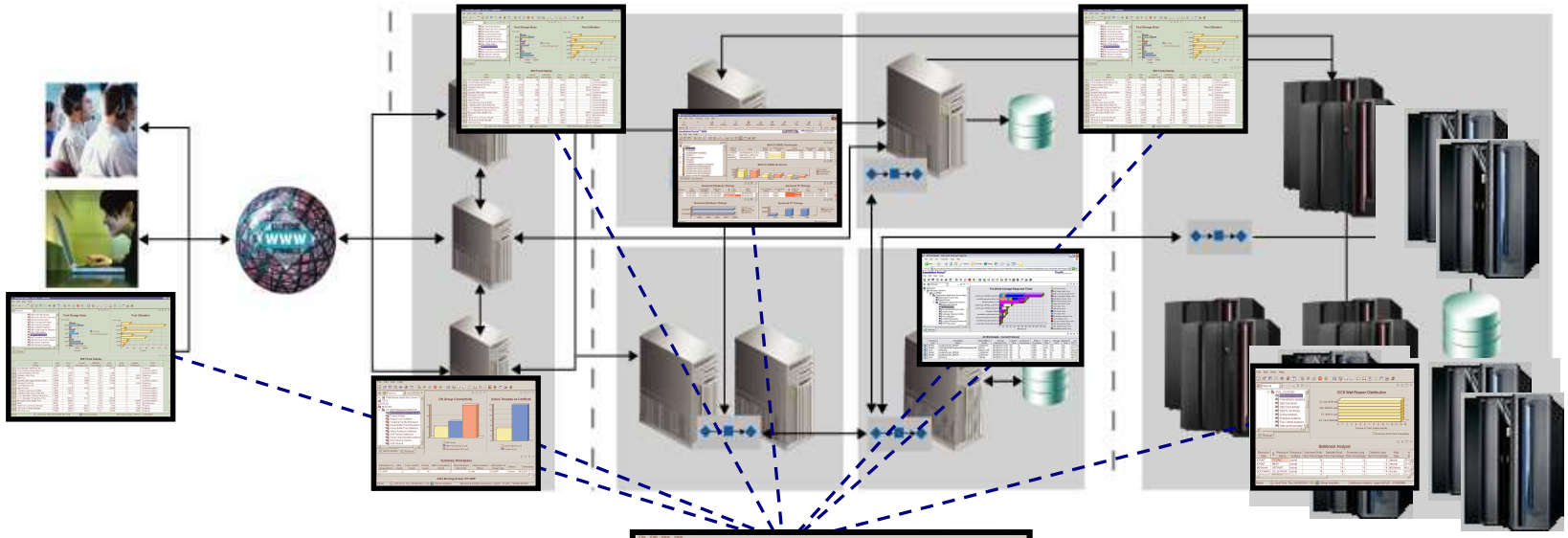
End to End Management from Tivoli

System z Portfolio



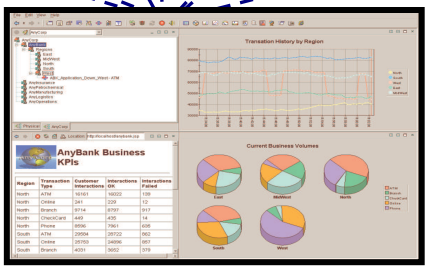
Complete View Of Application Performance

A Dynamic Role-based Policy Workspace for Integrating IT Operations Silos



Integrating Products

- Tivoli Enterprise Console
- NetView for z/OS
- System Automation
- Tivoli Workload Scheduler
- Tivoli Monitoring Version 5
- Tivoli Service Level Advisor
- Tivoli Business Service Manager
- *Netcool OMNIbus Active Event List*



Tivoli Enterprise Portal (TEP)

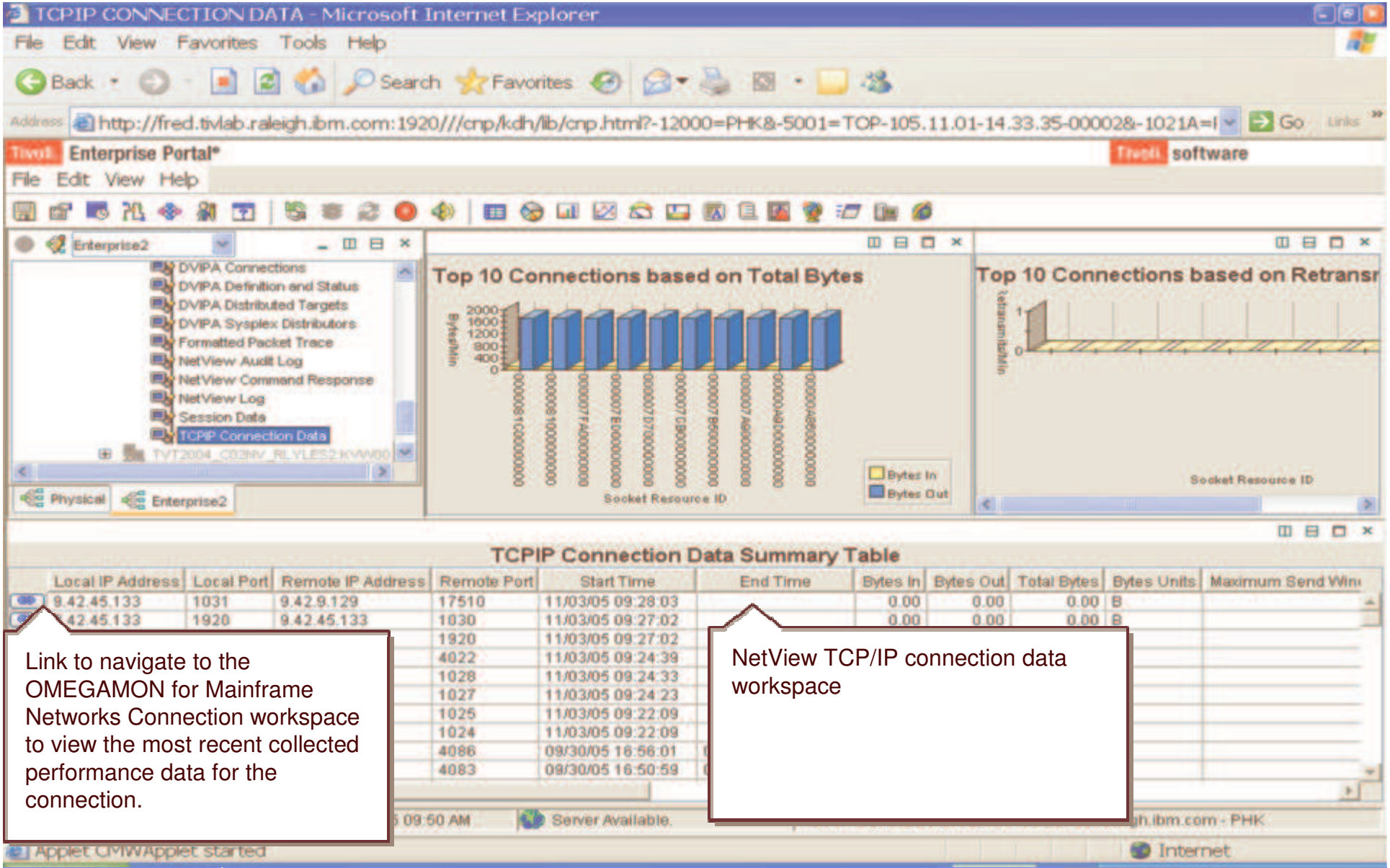
Embedded Portal for

- Tivoli OMEGAMON for System z
- Tivoli Monitoring Version 6
- IBM OMEGAMON z/OS Management Console
- Tivoli Composite Application Manager Family

New Interoperability/Integration Via TEP

- NetView z/OS V5.2
  - Consolidated TCP/IP workbench with both availability and performance data
  - Interoperability with OMEGAMON XE for MF Networks
  - Workspaces linked with other OMEGAMON XEs
- Tivoli Workload Scheduler
  - Launch-in-context via TEP
  - Monitoring of TWS jobs and OMEGAMON events on a single interface
- Tivoli System Automation
  - Integration via TEP with launch-in-context
  - Additional integration between TSA and TWS

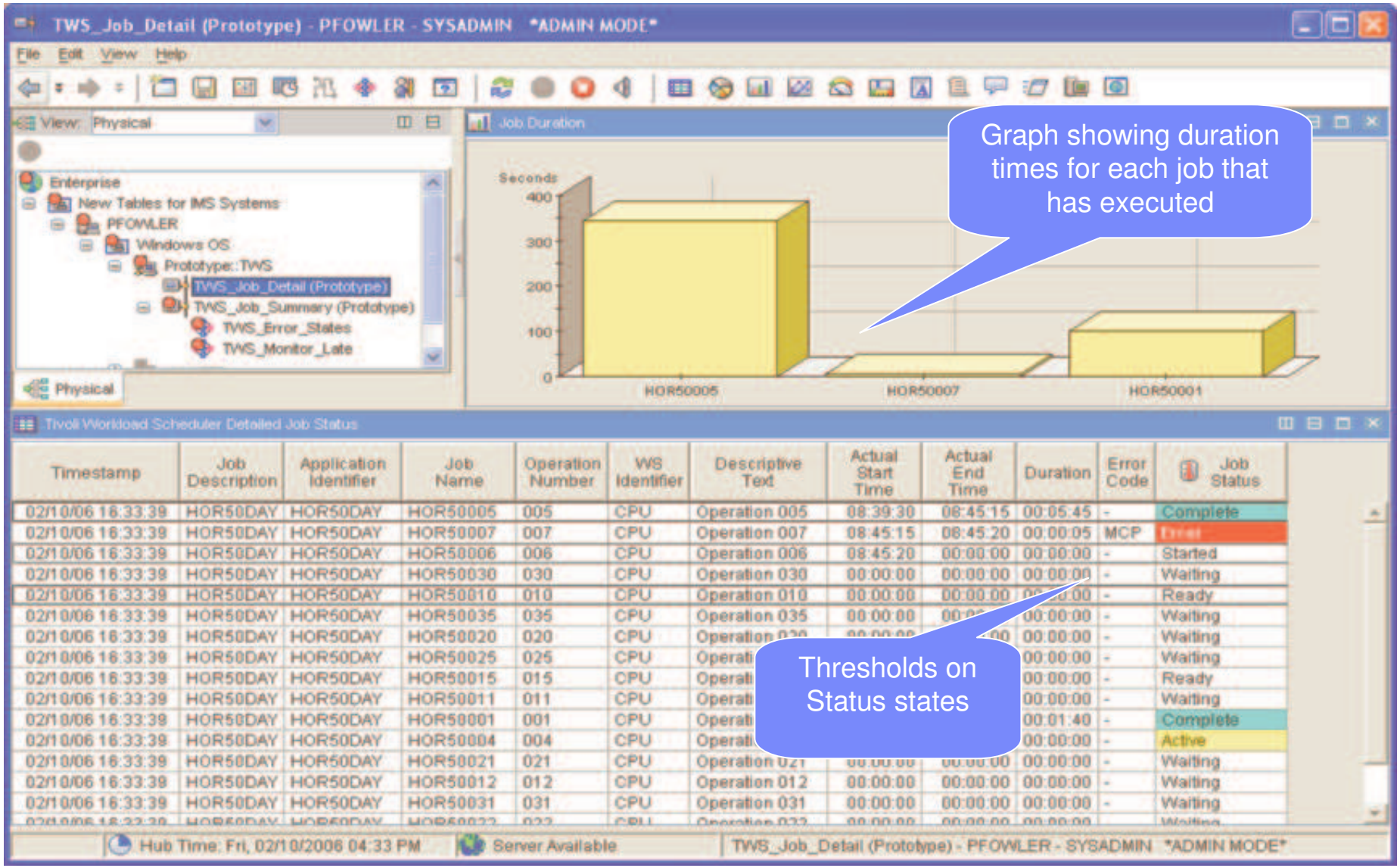
NetView TCP/IP Connection Data Workspace



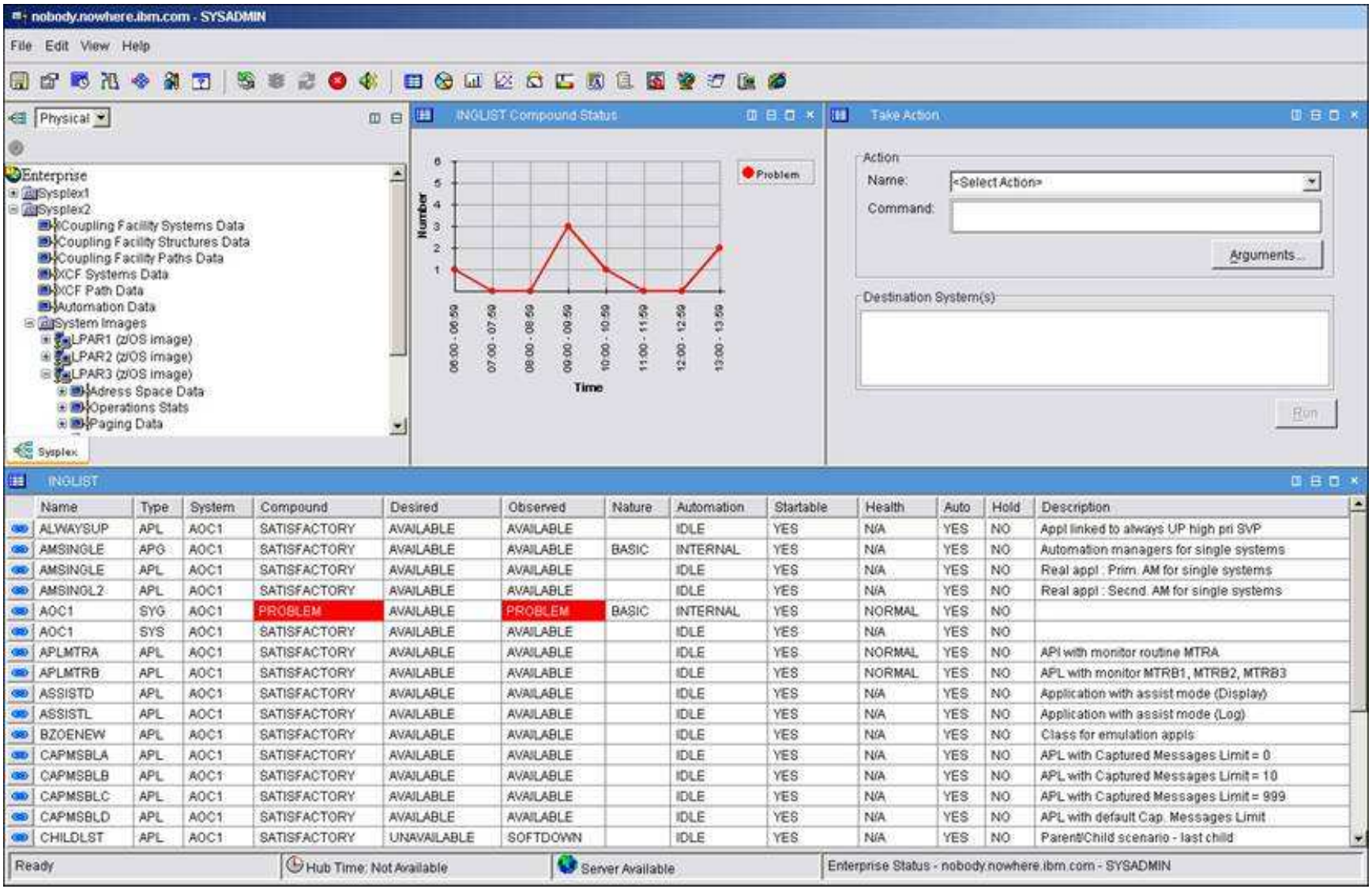
Link to navigate to the OMEGAMON for Mainframe Networks Connection workspace to view the most recent collected performance data for the connection.

NetView TCP/IP connection data workspace

TWS on TEP: Details for a Job Description



TSA on TEP: INGLIST – Before and After



OMEGAMON 4.1 Key Deliverables

- **Customer Satisfaction**
  - Globalization
  - Currency Exploitation of new OS and middleware releases
  - Customer Enhancements
  - Tactical enhancements to 3270 interfaces
- **Portfolio Simplification**
  - Candle Management Workstation and OMEGAMON II continued movement to XE
  - Merging of functionality in product suites where it makes sense
- **Integration**
  - Dynamic Workspace Linking
  - Launch in Context
    - TSLA, TBSM, and more
  - Tivoli Data Warehouse – pruning and aggregation
- **Serviceability**
  - Problem Determination Guides
  - IBM Support Assistant plug-ins
  - Agent Versioning support
  - ICAT enhancements

Customer Satisfaction

- **Added Globalization to Group 1 languages**
  - French, German, Italian, Spanish, Portuguese, Chinese (simple & traditional), Japanese, Korean
- **Currency and Exploitation**
  - Day One z/OS Version 1.8 Support/Exploitation
  - Added zIIP monitoring by OMEGAMON XE on z/OS & XE on DB2 PE/PM on z/OS
    - Day 1 support via service for OMEGAMON XE z/OS and DB2 PE/PM V3.1 via PTF and enhanced support in 4.1
    - zIIP address spaces, service classes, LPAR data, DDF server thread data, workloads eligible for zIIP that are running on standard CPUs
  - CICS Transaction Server V3
- **Tactical Enhancements to 3270 interfaces**
  - Application Trace Facility for OMEGAMON XE for CICS now in “Classic”

Integration

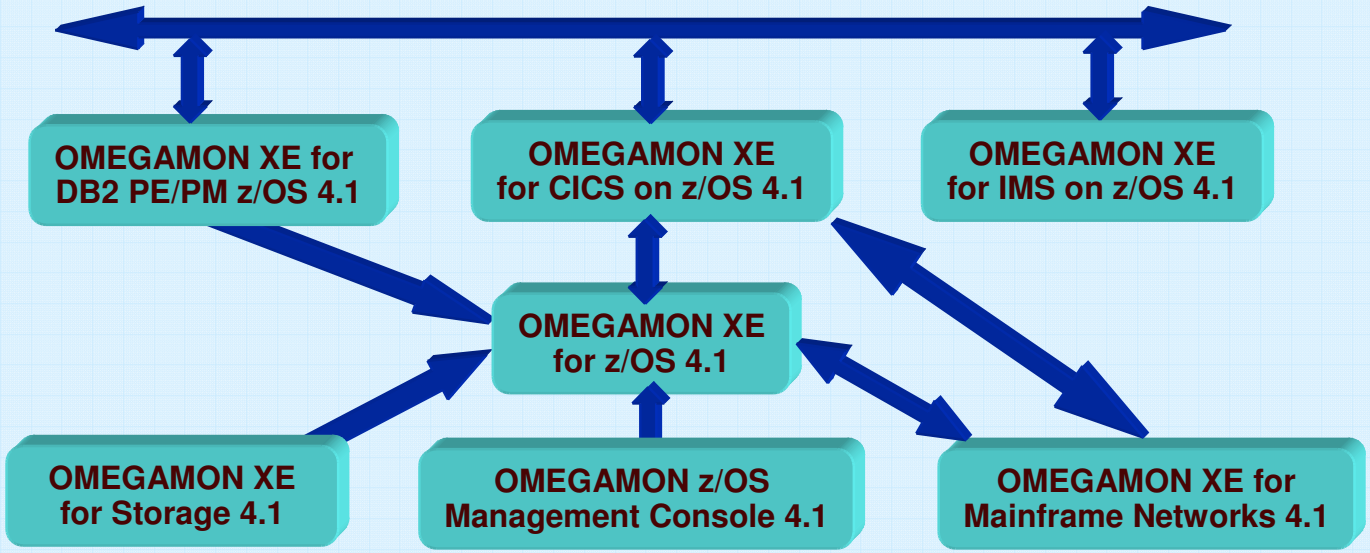
- **Dynamic Workspace Linking**
  - THIS IS A BIG ONE – see following slides
- **Launch in Context**
  - TSLA, TBSM, and more
- **Tivoli Data Warehouse – pruning and aggregation**
  - Automatic deletion of data and consolidated reporting by groups, dates, etc.
  - Better long-term historical
  - Reduces storage requirements
- **CCMDB TEP Discovery Library Adapter**

Dynamic Workspace Linking Functionality

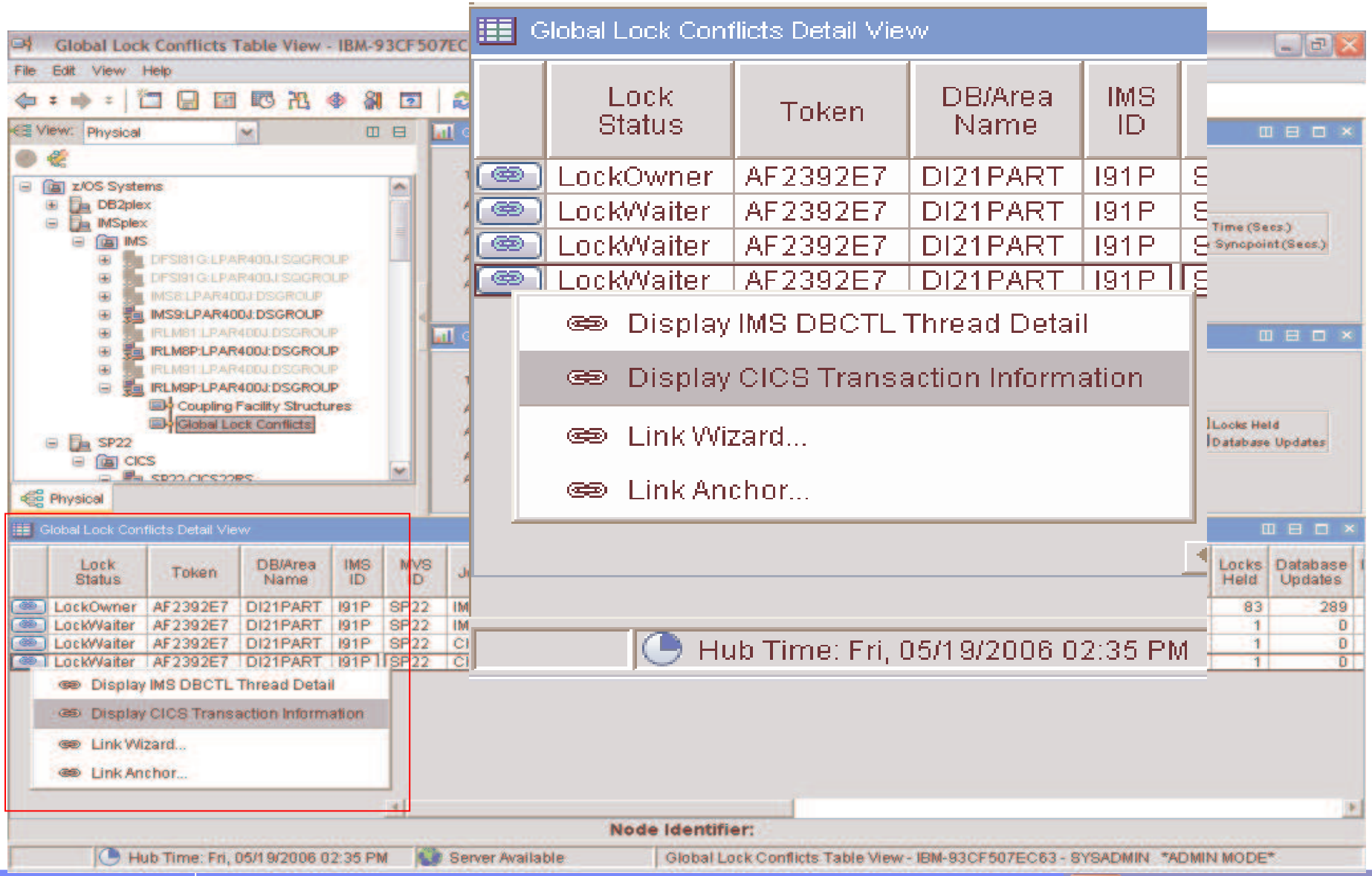
Problem: **How do I quickly find a potential problem that requires multiple monitoring products?**

Scenario: **Dynamically link in context from CICS transaction to the associated DB2 thread**

Solution: **Dynamic Workspace Linking**
Product provided links & user customized



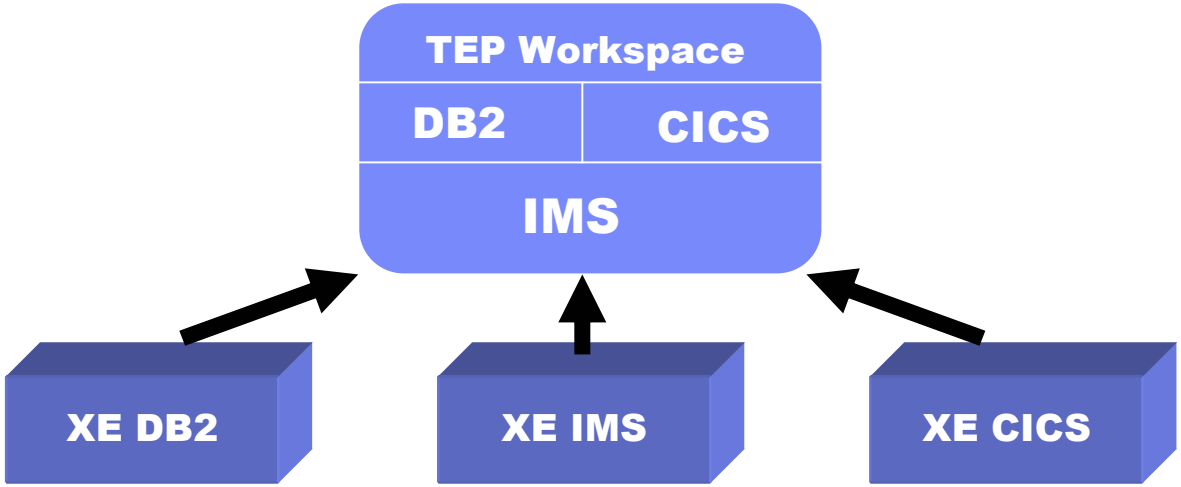
Dynamic Workspace Linking



Dynamic Workspace Linking and OMEGAMON DE

- Dynamic Workload Linking (DWL) is linear

- DWL cannot combine attributes from multiple products on a single workspace on z/OS without DE
- DWL cannot provide policies or workflow automation without DE



Serviceability

- **IBM Support Assistant**
  - Plug-ins to improve product support
- **Problem Determination Guides**
  - Help customers diagnose and solve operational problems
- **Agent Versioning added**
  - Multi-product version support enable incremental deployment of OMEGAMON 4.1 products
  - Customers can run 3.1 and 4.1 versions on different boxes/LPARs
  - Makes migration to full ITM 6.1 underlying infrastructure easier
- **IBM Customization Assist Tool (ICAT) enhancements**
  - Simplify SMP/E and Run Time Environment (RTE) installation and deployment (no need to run RTE Load job)
  - Simplify configuration with the installation of service
  - No need to stop all monitors to activate service on one monitor

OMEGAMON XE Version 4.1

- **OMEGAMON XE on z/OS V4.1**
  - zAAP and zIIP processor usage and reporting
  - I/O rate by address space and Real Storage information from CUA
  - z/OS Exploitation - CF structure duplexing reporting
  - Enclave DB2 and z/OS transplex,
  - Basic RMF III launch, optional RMF collection for CF data
    - Better integration with RMF data
    - Higher frequency collection
    - Trade-off: No detail path information
- **OMEGAMON XE for CICS V4.1**
  - CICS TS 3.1 Exploitation
    - Web Service analysis reports for Web Service Details, Virtual Host Detail, Pipeline Detail, Document Template Detail
    - Business Transaction Services (BTS) support for long running processes, type, name, container, activity
    - Enqueue pool details for recovery
  - Data moved from CUA/Classic to XE
    - CICS Service Level Analysis
    - Application Trace Facility

OMEGAMON XE Version 4.1 (Continued)

- **OMEGAMON XE for IMS V4.1**
  - New Reporting
    - TRF reporting capability has increased precision expanding transactions to the millisecond
    - HALDB – high availability database summaries, partition details, etc.
    - DBCTL Detail Thread reporting for monitoring activities
  - Data from CUA/Classic to XE
- **OMEGAMON XE for DB2 PM/PE V4.1**
  - Support for zIIP processor usage that is being introduced on the System z9 platform from a DB2 perspective Top ten volume reports
  - DB2 version 9 day one support
  - Enhanced Thread Overview: Show additional LOCK information and Changed Pages in all Group Buffer Pools.
  - Migration from ROBOHELP to Eclipse for added diagnostic help capabilities.

OMEGAMON XE Version 4.1 (Continued)

- **OMEGAMON XE for MF Networks V4.1**
  - New performance reports for VTAM buffer pool and address space workspaces
  - New TN3270 server session workspaces
  - Enhanced FTP records resulting in performance improvement.
  - Enhancements to Enterprise Extender (EE) reporting
- **OMEGAMON XE for Storage V4.1**
  - New dataset attribute database allows versatile and granular reporting capabilities at the dataset level
  - New problem solving workspaces adding to your problem determination capabilities
  - New storage toolkit for DFHSM and DFDSS functions for database administrators
- **OMEGAMON XE for z/VM and z/Linux V4.1**
  - Single solution for managing both z/VM and z/Linux from TEP
  - Leverages value of z/VM Performance Toolkit
  - Highest list of z/Linux Workspaces

OMEGAMON XEs v4.1 – SPE

- **OMEGAMON XE on z/OS**
  - Support for z/OS V1.9
  - OMEGAMON Classic enhancements
- **OMEGAMON XE for CICS**
  - Support for CICS TS V3.2 and z/OS V1.9
  - OMEGAMON Classic enhancements
  - DWL to support new MQ workspace
- **OMEGAMON XE for IMS**
  - Support for IMS V10 and z/OS V1.9
  - Create situation and send alert for IMS transaction in status STOP,TRA
  - Enhancements to TRF monitoring and reporting

OMEGAMON XEs v4.1 – SPE (continued)

- **OMEGAMON XE for Storage**
  - Provide a DWL for cross system volume report
  - Provide an DFSMShsm cancel command for active tasks
- **OMEGAMON XE for DB2 PE/PM**
  - Improved scalability post-processing large amounts of DB2 data
  - OMEGAMON Classic enhancements
  - DWL with OMEGAMON XE for MF Networks and NetView for z/OS
- **OMEGAMON XE for z/VM and Linux**
  - Support for z/VM V5.3, RHEL 5 and SLES 9, 10
  - Additional integrated monitoring of Channels and Cache
- **OMEGAMON XE for Mainframe Networks**
  - Monitoring of IPSec secure data transmission – effectiveness of IP filters, performance of IPSec tunnels, identification of potential network attacks

Summary

- OMEGAMON Installation
- Yes we have learned a lot !
- OMEGAMON XE Version 4
- Integration via TEP and DWL
- Many functional enhancements
- Thank you for your attention