

IBM Systems Director Demo Guide

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Purpose of this Document

This IBM Systems Director Demo Guide was written for IBM and Business Partner Technical Sales Specialists who provide IBM Systems Director demos to clients as part of pre-sales support. The primary goal of this guide is to help technical seller deliver a more effective IBM Systems Director demo by providing access to an environment to practice, examples of experts demoing capabilities of IBM Systems Director and best practices for success.

The guide outlines how to access the demo environment and steps to prepare prior to giving a client demo, It also addresses the most commonly asked questions, key areas of value and differentiation to highlight, questions to ask for validation of client needs and general demo best practices.

Please note that this is version of the Demo Guide is that includes Phase 1 and Phase II of Systems Director deployment in the Demo Central environment. There will be one subsequent phases that will be added over the next four to six weeks.

Phase II which was added with this revision includes enhanced Cross platform and platform specific management tasks:

- Agent Deployment
- Associating Systems with Auto rename
- Basic Monitors and Event Action Plans
- Configuration Manager
- Static and Dynamic Groups
- Role Based Security
- Viewing Hardware Log (System x)
- Management Processor Launch In Context (System x)
- Viewing Light Path diagnostics(System x)

Phase III which will be available before June ,will include advanced management tasks:

- Hardware Management Console Extended Management (Power)
 - Service and Support Manager
- VM Control Express Edition
 - Automated relocation
- Active Energy Manager
- Storage Control
- VMControl Standard Edition
 - Image Repositories
 - Image capture and deployment
- VMControl Enterprise Edition

- Server System Pools - Deployment of virtual servers into pool
- Storage System Pools - System Pool Dashboard
- Resiliency Policies

Notifications will be sent when the additional functionality is available

Introduction

Overview

An important aspect of pre-sales activities in Systems Software is providing a powerful IBM Systems Director demo. A powerful demo engages the client, showcases features that will help the client achieve their business goals and progresses the sale by validating the clients need for the solution and gaining the their agreement to proceed. Most people are visual, that is they have an easier time understanding the applicability and value of something when they see how it will help them. A good demo **allows a prospect to easily visualize how the software will accomplish their key business requirements**. A demo is not just a description of what the Solution is but is a more thorough exploration of how that Solution works to solve the client's issue.

Success in delivering a successful demo is practice to build confidence along with guidance, mentoring and tips from the experts. We are going to begin with reviewing the demo environment – what is it composed of, how do I access it and its intended use. In the next section we'll review the preparation steps including the recording and scripts available to help you.

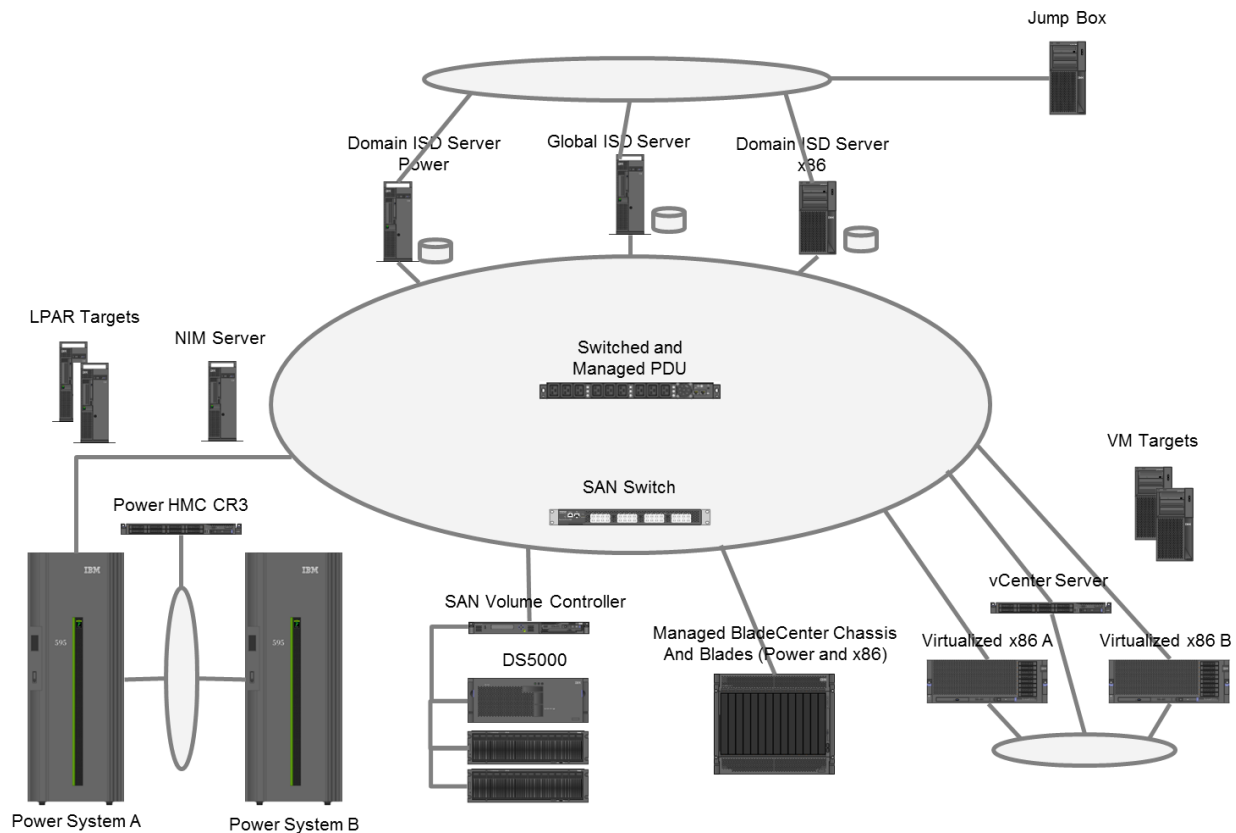
IBM Internal resources will have a mandatory practicum activity to deliver a Systems Director Demo with a client in their territory before the end of third quarter. This material will help with the preparation.

What's available in the IBM Systems Director Demo environment?

The environment that has been built at Demo Central is a cross-platform "live" demonstration of IBM Systems Director and the Advanced Managers. The demo consists of basic and enhanced management of a variety of H/W including:

- BladeCenter
- System x
- Power Systems
- Storage

Below is an architectural diagram of the hardware environment. A complete bill of material for the hardware has been included in the appendix.



How to access the IBM Systems Director Demo environment:

This demo environment is available for both practicing the delivery of demos as well as for providing client facing demos. The environment will be available 7 days week 24 hours a day.

Priority will be given for client demos. Access to the environment will be through a sign-up process. Each sign-up slot is allowed for a maximum 4 hour time frame (3 hours actual demo time). This time slot should allow for adequate access for both client demos as well as a reasonable practice period time frame.

Note: Because of the workflow that occurs prior-to and following the demonstration, you must schedule the demo start-time 30-minutes prior to the actual demonstration, and conclude your demo 30-minutes prior to the scheduled end -time.

To schedule the demo, navigate your web-browser to <http://demoworks.democentral.ibm.com/demoworks/ctrlpnl.php> and log in using your Intranet ID and Password. From the Demoworks scheduler page, select the link **New Reservations** in the left navigation bar. Refer to Figure 1 – New Reservations on page 6 for an example.

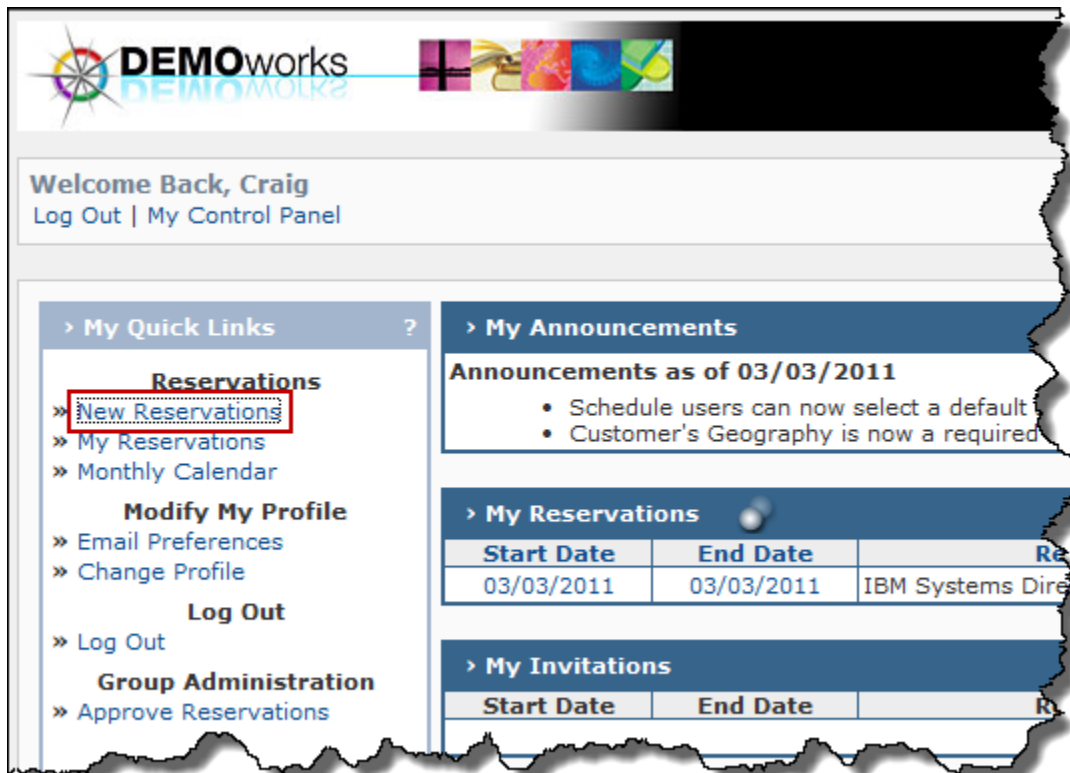


Figure 1 – New Reservations

On the reservation screen, click the **View Schedule** drop-down box and select one of the three IBM Systems Director demos. Refer to Figure 2 – View Schedule on page 7 for an example.

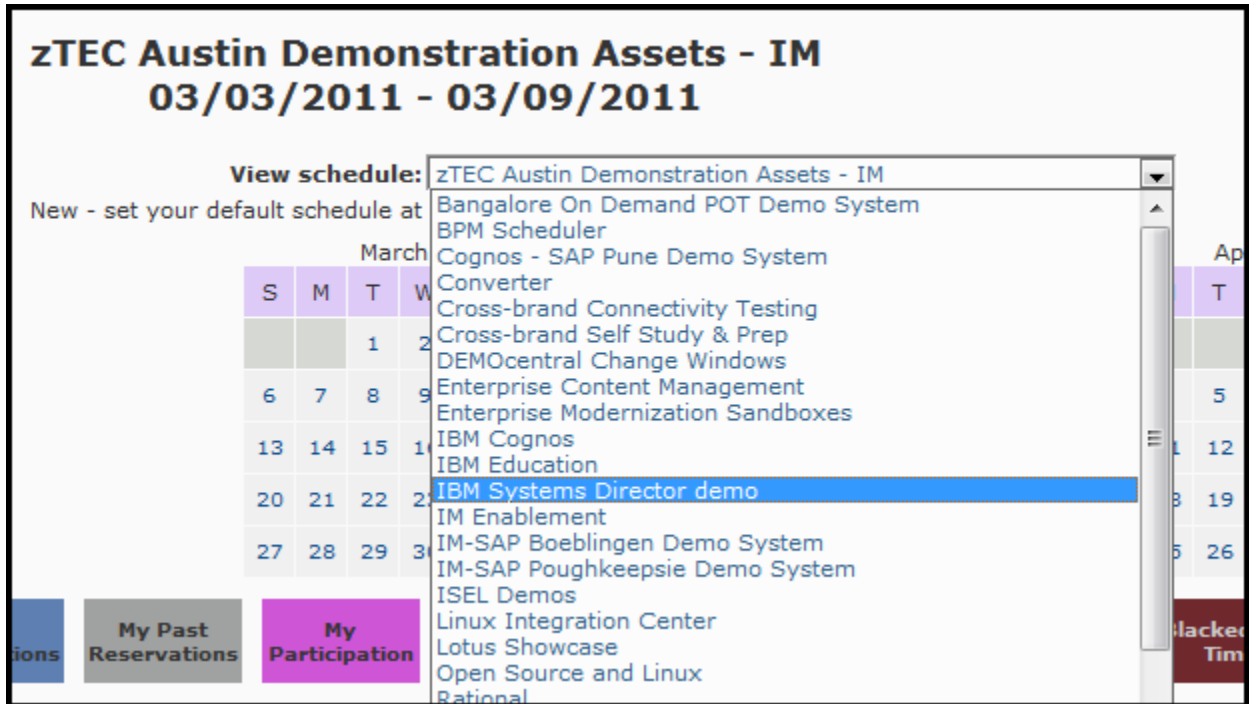


Figure 2 – View Schedule

There are currently three IBM Systems Director demo systems available, depending on what you would like to demo. The first demo shows IBM Systems Director running on Windows, managing both x86 and Power systems endpoints. The second demo shows IBM Systems Director running on AIX, managing both x86 and Power systems endpoints. The third demo is for the Hierarchical Management Server demo.

Note: If reserving the Hierarchical Management Server demo, you must also reserve one of the other demo systems. The reservation system will not automatically reserve it for you.

To reserve the selected demo, simply click in one of the available (white) calendar blocks. The square will turn green to indicate that time is available. You can also use the Reservation Color Key to view other reservations. Refer to Figure 3 – Calendar View on page 8 for an example.

All times are in user's local time zone

Thursday, 03/03/2011	12:00am	1:00am	2:00am	3:00am	4:00am	5:00am
IBM Systems Director						
Friday, 03/04/2011	12:00am	1:00am	2:00am	3:00am	4:00am	5:00am
IBM Systems Director						
Saturday, 03/05/2011	12:00am	1:00am	2:00am	3:00am	4:00am	5:00am
IBM Systems Director						

Figure 3 – Calendar View

Once you have selected your starting time, a pop-up window will allow you to specify additional reservation details, including end-time, customer name, Siebel number, revenue potential, and geography. Once you complete these fields, press **Save**. Refer to Figure 4 – Demo Reservation on page 9 for an example.

Please note, if you are reserving the Demo system for a practice session you should use the following information. An example is shown in Figure 5.

- Client Name: **Practice**
- Siebel Number: **0000**
- Revenue: **0**
- Customer geography: **Your geography**
- Comments: Not required but you may indicate what part of the demo you are practicing

http://demoworks.democentral.ibm.com/?type=r&machid=sc14d6fe10592b2d&start_da...

IBM Systems Director

Basic Accessories

Location	http://homepage.of.demo		
Phone			
Notes			

Repeat every:
 1 -- Never --

Repeat until date:
 Choose Date ...

Reminder -- Never --
 before reservation

Please select the starting and ending times:

Start	End
03/04/2011	03/04/2011
8:30am	12:30pm

Minimum Reservation Length: 0 hours
 Maximum Reservation Length: 4 hours

Will be reserved for:

Name	Craig Elliott
Phone	1-469-549-8409
Email	elliottc@us.ibm.com

Customer information:

Customer Name	My Co
Siebel Number	2-345345
Revenue Potential	5,000,000
Customer's Geography	West

Customer name and geography along with either Siebel number or potential revenue is required. Potential revenue must be numeric field and is in US dollar amount.

Summary

IBM DEMOcentral

Figure 4 – Demo Reservation for Client

New Reservation - Mozilla Firefox: IBM Edition

http://demoworks.democentral.ibm.com/demoworks/reserve.php?type=r&machid=sc14d6fe10592b2d&sta

Location	http://homepage.of.demo
Phone	
Notes	

Repeat every: 1 -- Never --
 Repeat until date: Choose Date ...
 Reminder: -- Never -- before reservation

Please select the starting and ending times:

Start	End
03/15/2011	03/15/2011
3:00pm	3:30pm

Minimum Reservation Length: 0 hours
Maximum Reservation Length: 4 hours

Will be reserved for:

Name	Susan Miele
Phone	1-860-275-5728
Email	smiele@us.ibm.com

Customer information:

Customer Name	Practice
Siebel Number	0000
Revenue Potential	0
Customer's Geography	East

Customer name and geography along with either Siebel number or potential revenue is required. Potential revenue must be numeric field and is in US dollar amount.

Summary

This is a practice session for basic functions

Save Cancel Check Availability

IBM DEMOcentral

Done

Figure 5 – Demo Reservation for a Practice Session

Once your reservation has been saved, you will receive an email containing the reservation details, including the URL to access the demo, as well as the User ID and Password required to log in to the demo.

If your demo is cancelled for any reason, you should delete your reservation. Return to the Control Panel, and click the **Delete** link for you reservation.

Updates, Recommendations and Questions

As the environment and materials are used, we would appreciate your feedback.

Please send any questions or recommendations for improvement to elliottc@us.ibm.com or smiele@us.ibm.com..

Demo Modules

The practice demo modules have been divided into logical, manageable section. This has been done for two primary reasons. It allows the resource that is practicing and absorbing the material to do review it over several sessions with special focus in the area he or she needs additional assistance. It also breaks into pieces that the demo provider can compose together based on client needs without showing capabilities that aren't relevant to the client.

In general before giving a demo the demo resource should prepare by:

1. Reviewing the demo modules and scripts to first understand general best practices and best practices in demonstrating particular functional areas.
2. Practice until confidence is high in delivering a powerful demo

Work with extending selling team to:

3. Understand the current customer environment and challenges (pain points)
4. Understand competitive threats and alliances
5. Determine which capabilities will help solve their challenges (scope of demo)
6. Determine who from the client should be in the meeting and who from IBM should be available for support
7. Identify value references and win stories that align with client needs that will become part of the discussion
8. Identify and Schedule adequate time in demo central environment
9. Identify with internal team what the next steps will be with client. (Should be an agreed to activity to advance the sale)
10. Perform Dry Run through for this client

Demo Preparation and General Demo Best Practices

Because of the workflow that occurs prior-to and following the demonstration, you must schedule the reservation start-time 30-minutes prior to the actual demonstration, and conclude your demo 30-minutes prior to the reservation end -time.

When demonstrating the product functionality, follow the 80-20 rule – 80% of the customers use 20% of the product, so focus on that 20%. If the customer's pain-points are not addressed by the most popular 20% of the IBM Systems Director functionality or one of the Advanced Managers, you should consider engaging a Tivoli sales specialist to see if there is another offering that better addresses these issues.

Try to stay on script as much as possible. However, you must be comfortable with not only the functionality of the product, but how it works, to be able to address the customer's concern when you do go off-script. Many times, requirements can be

address simply by understanding how to use the product. For example, if a customer asks if IBM Systems Director can produce reports, rather than saying “No”, explain how information in tabular views can be sorted, enhanced, removed, and exported to produce reports.

One potential issue to be aware of is less-than desired performance during the demo. This is generally a result of poor network performance between the demo location (e.g. customer site) and the IBM network. In these instances, you should be prepared to explain that Console performance is related to network performance between the Console and Server.

The following sections of this document go into detail regarding the various IBM Systems Director functions, identifying those areas you should focus on, and common questions you may receive.

Basic System Management Demonstrations

The Basic Systems Management demonstrations include those base management capabilities used by a large number (e.g. > 80%) of customers, focusing on product navigation, discovery and inventory, system updates, and alerting/automation. This should be the starting point for all demonstrations. You will often find that these functions meet the platform management needs of many of your customers.

Introduction to Basic Systems Management Capabilities

This demonstration is designed to familiarize the customer with the capabilities of IBM Systems Director, with an emphasis on console navigation.

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Does the customer have difficulty identifying all of their physical servers?
 - Is the customer running a “thin” I/T staff, resulting in reduced training opportunities for its staff?
 - How many management tools has the customer deployed?
 - Are there internal political or departmental barriers that inhibit sharing of management tools?
- Key Benefits and Differentiating features for IBM Systems Director
 - IBM Systems Director performs all management tasks thru the Server (some applications use point-to-point management under the covers), simplifying network/firewall configuration.
 - IBM Systems Director Agents use the same management protocols regardless of operating system.

- All management tasks reside on the IBM Systems Director Server (some applications have part of the functionality that actually runs outside of the management server).
- The Common Agent runs as a single service (some applications have many services).
- Best Practices when using IBM Systems Director
 - Start with a subset of endpoints and management functions – don't try to "boil the ocean".
 - Define your management requirements and perform the configuration based on those requirements.
 - Reuse Groups, Automation Plans, etc. wherever possible.
- Typical questions that clients ask when they first see IBM Systems Director
 - Q – What browsers are supported?
A – Firefox and Internet Explorer. Chrome and Safari should work, but haven't been tested and therefore aren't supported.
 - Q – How can you restrict who can use IBM Systems Director?
A – IBM Systems Director has role-based security to limit who can login, what systems they can manage, and the tasks they can perform against those systems.
 - Q – Can IBM Systems Director run on one OS, but manage Agents on other OS's?
A – Yes.
 - Q – What reporting capabilities are there?
A – You can export all tabular views, as well as all inventory information, in a variety of formats. Using the command-line interface, you can set up recorders for resource monitor values and then output the data to a file in csv, txt, html or xml formats.
 - Q – Will IBM Systems Director integrate with product XYZ?
A – Most likely the answer is 'YES' to some degree. There are a number of interfaces (REST, SNMP, Event Actions, custom scripts) that work with most 3rd party applications.
 - Q – Can you shorten the URL to something like www.isd.com?
A – No. You can change the ports that are used to the typical 80 and 443, but you cannot shorten the URL (i.e. remove /ibm/console). As a work-around, you can install another web-server (i.e. IIS or Apache), and have it perform a redirect to the IBM Systems Director URL.
 - Q – Can you change the default startup page to something other than the Welcome page?
A – Yes, you can specify any task(s) to be the startup page(s).
 - Q – What types of resources are discovered using the Discovery button on the Welcome screen?

A – Operating System MEPs (Common Agents, Platform Agents, and Agentless Systems).

Refer to [<http://lt.be.ibm.com/stg/ltu33629>] for an example demo recording and script for this topic.

For a technical overview of IBM Systems Director, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.main.help.s.doc/fqm0_c_director_technical_overview.html.

Discovery and Inventory Capabilities

To manage a resource within an environment or view inventory data about it, that resource must first be discovered and, after access is granted, an inventory must be collected. The resource is recognized and added to the comprehensive list of native resources and native attributes for the system. Discovery and inventory collection are the two primary tasks that are used to connect to supported resources on the network to collect information about them.

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Does the customer have difficulty identifying all of their deployed resources?
 - How does the customer currently track their deployed resources?
 - How does the customer identify current versions of systems software (e.g. BIOS, drivers, firmware)?
 - How does the customer track deployed OS versions, application versions, hotfixes?
- Key Benefits and Differentiating features for Discovery and Inventory
 - Discovered resources can be dynamically grouped based on attributes (firmware version, location, subnet, etc.) making it easy to locate the resource you are looking for.
 - Groups of resources can be exported, creating simple reports.
 - Inventory data about resources or groups of resources can be exported, creating simple reports.
- Best Practices with Discovery and Inventory
 - When performing Discovery, limit protocols and address ranges as much as possible
 - Collect Inventory at a scheduled interval (monthly, or prior to checking update compliance), on a subset of systems (<50 at a time).
- Typical questions that clients ask when they see a demo of Discovery and Inventory

- Q – Can IBM Systems Director generate reports?
A – IBM Systems Director can produce simple reports by (a) exporting the data contained in tabular views, (b) exporting data using the command line interface, or (c) by extracting data using the REST APIs.
- Q – Can IBM Systems Director discover and manage resources on multiple/remote networks?
A – Yes, IBM Systems Director can discover resources on any routed network.
- Q – How can I find the versions of installed system updates?
A – Look in the Software category, and search for BIOS, or use Show Filter Row and filter on BIOS, Driver, Firmware, etc.
- Q – How do I restrict what resources are discovered?
A – Limit the resource type, or addresses used during discovery.
- Q – How do I restrict what inventory is collected / displayed?
A – Create an Inventory Profile to restrict the information that is collected / displayed.
- Q – Can I import a list of systems to be discovered?
A – Yes, using a Discovery Profile.
- Q – Do I have other options for performing a discovery?
A – Yes, you can use SMCLI to script the collection of inventory information.
- Q – What happens if the password for the user ID used during Request Access changes?
A – It depends on the resource being managed. For IMM, Platform Agents, and Common Agents, the ID/PW are only used for certificate distribution. For other resource types, you will need to Request Access again using the new password.
- Q – Is there a way to authenticate to an Agent without requiring the use of an administrator/root account?
A – Yes, if using Common Agents. You can specify the Agent Registration password, either during installation or afterwards, to have the Agent automatically register itself to be managed. Additionally, Agentless Unix systems can utilize the privilege escalation tool "sudo" to use a non-root account.
- Q – I discovered my resources using the Discover button on the Start tab of the Welcome Page, but not all were discovered. What happened?
A – The Getting Started Discovery only finds Agents in the same subnet as the IBM Systems Director Server. You need to use other discovery options to find other resource types or resources in other subnets.
- Q – Can I discover all of my resources on all subnets in one step?
A – Yes, using a Discovery Profile (depending on the resource types).
- Q – How frequently does IBM Systems Director collect inventory?
A – IBM Systems Director does not automatically collect inventory. You can configure IBM Systems Director to collect inventory during discovery (when using a Discovery Profile), and can schedule periodic collection of inventory based on user requirements.
- Q – My discovered resources have a strange name assigned to them. What is this and how do I change it?

A – IBM Systems Director uses a naming convention to name devices that do not have a user-assigned name. These can easily be changed using Auto Rename.

Refer to [<http://lt.be.ibm.com/stg/ltu33630>] for an example demo recording and script for this topic.

For a technical overview of discovering resources and collecting inventory using IBM Systems Director, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.discovery.helps.doc/fqm0_t_discovering_and_inventoring_resources.html.

Update Manager Capabilities

Update manager enables you to monitor your systems for needed updates (OS, BIOS/Firmware, device drivers) by automatically checking for available product updates and identifying which systems need attention. It also provides you with the ability to schedule the installation of updates at convenient times for your network and users.

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - How much do you spend manually researching systems updates?
 - Have you ever missed a critical system update?
 - How often do you have to recover due to issues with the installation of fixes?
 - Do you consistently apply fixes? How do you audit this?
 - How much time do you spend keeping an updated spreadsheet of every physical and virtual server's operating system, system firmware, HMC code level, VIOS code level, etc?
- Key Benefits and Differentiating features for Update Manager
 - With a single click you can get a list of any available updates
 - Excels at managing currency for systems running your critical workloads saving on average 5 hours per week per administrator
 - Broad support for IBM platforms and operating systems for complex environment management that allows for consistency and one set of tools
 - Allows downloading of fix prerequisite and “readme” information prior to downloading the full fix
 - Uses same set of protocols as other management tasks
 - "Simplifies documentation of a dynamic server environment.
- Best Practices with Update Manager:
 - Plan to update Systems Director at least twice a year to ensure maximum stability and value
 - Check for updates monthly

- Leverage installation staging to schedule updates more efficiently and bundle firmware and systems updates using groups where appropriate
 - Leverage compliance policies with notifications to ensure company standards and policies are enforced for maximum protection
 - Apply updates to non-production servers first, then low-impact servers and finally important production servers first
 - Maintain and review logs for troubleshooting
- Typical questions that client ask when they see a demo of Update Manager:
 - Q – Can you use Update Manager to apply Windows Hot Fixes?
A – No. You can use Update Manager to apply OS updates to Linux, IBM i and AIX, but not Windows.
 - Q – Can you use Update Manager if you do not have an internet connection?
A – Yes, you can download updates manually and import them into the repository.
 - Q – How can you use Update Manager for a specific set of tested updates?
A – Create a dynamic update group that contains those tested updates, and then use that update group in a compliance policy. Create separate update groups and compliance policies for production and test systems.
 - Q – Can Update Manager be used to update systems on remote networks?
A – Yes, assuming the WAN has sufficient bandwidth.
 - Q – Is a reboot required following the installation of updates?
A – It depends on the update being applied. Some updates require a system restart before they take effect. Others do not require a reboot, or the reboot can be postponed. Check the README for the update to verify the reboot behavior.
 - Q – Do I need to install a FTP and/or TFTP server to use Update Manager to update my BladeCenter modules?
A – IBM Systems Director has a built-in TFTP server that can be used. You must install a FTP server for those modules that require it. The FTP server can reside on the IBM Systems Director Server itself.
 - Q – Must I create a compliance policy to display needed updates?
A – You must create a compliance policy if you want to be notified of needed updates. Otherwise, you can use Show Needed Updates to display a list of updates needed for a resource or group of resources on an ad-hoc basis.

Refer to [<http://lt.be.ibm.com/stg/ltu33516>] for an example demo recording and script for this topic.

For a technical overview of updating systems using IBM Systems Director, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.updates.helps.doc/fqm0_t_um_updating_systems.html.

Event Automation Plan Capabilities

By creating event automation plans and applying them to specific systems, you can automate tasks and other responses to situations that occur in your systems-management environment. For example, when a specified threshold is reached or a specified event occurs, you can be notified by e-mail or text message. Or, you can configure an event automation plan to start a program on a system or change a system variable when a specific event occurs.

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - How are you notified about hardware failure and pre-failure conditions?
 - What process do you use to notify the H/W vendor of H/W issues?
 - Are you currently integrating your H/W events into Enterprise Systems Management applications?
 - Explain your process for responding to H/W issues.
 - How much time is spend responding to H/W issues?
- Key Benefits and Differentiating features for Event Automation Plans
 - IBM Systems Director has more event actions than competitors' products
 - IBM Systems Director alerts can be integrated with Enterprise Systems Management applications including Tivoli and 3rd party products
 - Customized filters and actions can be reused in automation plans
 - Custom responses can be configured using 'Start a program' actions
 - Alerts are automatically sent to the IBM Systems Director Server
- Best Practices with Event Automation Plans
 - Minimize the number of Automation Plans
 - Reuse Event Actions whenever possible
 - If emailing several people, use email groups rather than multiple actions
 - Avoid using the 'Start a program' action for events that occur very frequently
 - Do **not** delete the default Automation Plan Log All Events
- Typical questions that client ask when they see a demo of Event Automation Plans
 - Q – Can Automation Plans be suspended during maintenance windows?
A – Yes. Right-click on a resource or group of resources and select Automation → Suspend Event Actions
 - Q – How can I view the overall health of my environment?
A – There are several ways to do this, including the Banner Scorecard, Active Status, Health Summary, and Event Log
 - Q – Is there a way to stop being notified about a certain event?
A – Yes. You can ignore events within Active Status.
 - Q – What must I do to enable IBM Systems Director to start processing events from my resources?

A – Simply discover them, authenticate with them, and collect inventory from them.

- Q – Can events be logged in the local OS event log?
A – Yes, for H/W events this happens automatically.
- Q – Do all errors in the operating system error log get sent to IBM Systems Director Server?
- No. For AIX and Power Systems, temporary and permanent hardware errors and some categories of software errors are sent from Common Agent systems to the IBM Systems Director Server. For Windows systems, Event Filters can be created to allow Event Log events to be processed by IBM Systems Director.

Refer to [<http://it.be.ibm.com/stg/ltu33631>] for an example demo recording and script for this topic.

For a technical overview of the automation capabilities of IBM Systems Director, refer to the InfoCenter at

http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.automation.helps.doc/fqm0_t ea_automating_tasks.html.

Enhanced Management Task Demonstrations

The Enhanced Management Task demonstrations include additional capabilities included with the base IBM Systems Director. These functions provide additional customer value, and are generally used when a customer is trying to address a specific issue. Included in this section is agent deployment, automatically renaming a managed resource, system configuration, security, performance monitoring and thresholds, and group management. Also included are platform-specific tasks including viewing lightpath diagnostics and hardware logs, as well as the launch in context (LiC) of the AMM console and HMC Management.

Agent Deployment Capabilities

Note: In order to push the Common Agent (as seen in the demo recording), the Global ISD management server must be up and running. So be sure to reserve the Global ISD server if this needs to be shown. The Global ISD server is not required to push the Platform Agent.

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Are you experiencing any resource availability or capacity issues when installing software?
 - What products are you currently using for software distribution?
 - How frequently do you update system applications?

- Key Benefits and Differentiating features for Agent Deployment
 - Ability to discover a remote system that isn't running an Agent, and "push" an Agent to that system
 - Can be used to upgrade Agents, from one version to the next, or from Platform Agent to Common Agent
 - Can customize Agent installation by modifying .RSP file
 - New versions of the Agent can be imported and distributed, allowing you to maintain currency
 - Old versions of the Agent can be imported and distributed, allowing you to standardize on specific versions
 - IBM Systems Director includes no-charge licenses for up to 20 instances of the Common Agent on non-IBM x86 systems

- Best Practices with Agent Deployment
 - Ensure that the system clocks on the systems that contain IBM Systems Director Server and Common Agent remain synchronized
 - On all managed Unix systems that use the ssh protocol to communicate with IBM® Systems Director Server, ensure that the PasswordAuthentication value in /etc/ssh/sshd_config is set to yes
 - Ensure that your system meets the hardware and software requirements for installation
 - Understand the currently installed software, to prevent port conflicts

- Typical questions that client ask when they see a demo of Agent Deployment
 - Q – Can I use the Agent Installation Wizard to install Agents on remote systems?
A – Yes, but the network bandwidth determines the viability of doing so.
 - Q – How many systems can I deploy the Agent to concurrently?
A – Best practice says you should limit it to approximately 20 concurrently.
 - Q – Can I use the Agent Installation Wizard to install patches to the Agent?
A – No. Patches to the Agent are applied using Update Manager.
 - Q – Will the Update IBM Systems Director link on the Welcome screen also update the agents in my environment?
A – No. This task will only update the ISD management server (including the agent on the management server) itself.
 - Q – Are the agent packages also included in Release Management-Agents after installing the ISD management server?
A – No. If installing from the DVD image, the agents will be included. If installing from the web downloadable package, the agents will not be included. It is also a good idea to ensure that the latest agent has been imported as well. For example, when installing ISD 6.2.1 management server from the 6.2.1 DVD, only the 6.2.0 agents will exist. So if 6.2.1 agents need to be deployed, those versions will need to be imported manually, as shown in the demo recording.

Refer to [<http://lt.be.ibm.com/stg/ltu33998>] for an example demo recording and script for this topic.

For a technical overview of Agent Deployment, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.install.helps.doc/fqm0_t_installing_agents.html.

Associating Systems with Autorename Capabilities

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Are all of your servers registered in DNS?
 - Do you currently manage your servers via IP address or hostname?
 - Do you plan on managing your servers out-of-band?
- Key Benefits and Differentiating features for Auto Rename
 - Enables you to create a template to use for naming resources within the IBM Systems Director console (assigns “friendly names” to resources)
 - Allows you to manage resources by the name you generally use, not the name discovered by default
- Best Practices with Auto Rename
 - When modifying the Auto Rename template, set the option ‘Do you want to automatically rename after discovery?’ to ‘No’. This is because a template can be used for multiple resource types, each of which may have different rename characteristics.
- Typical questions that client ask when they see a demo of Auto Rename
 - Q – When discovering resources, why are some of them named something strange like ‘IBM XXXX-XXX XXXXXXXX’?
A – Some devices do not have a name (physical servers, for instance). Therefore, IBM Systems Director assigns a label depending on the type of resource. Auto Rename allows you to automatically change this label to something friendly.
 - Q – Can you have two templates for one resource type?
A – Currently, you are limited to a single template per resource type.

Refer to [<http://lt.be.ibm.com/stg/ltu33999>] for an example demo recording and script for this topic.

For a technical overview of Auto Rename, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.discovery.helps.doc/fqm0_t_renaming_discovered_systems_automatically.html.

Configuration Management Capabilities

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - What is your password retention policy?
 - How do you make mass password updates to management processors?
 - How do you standardize the configuration of your systems?
- Key Benefits and Differentiating features for Configuration Manager
 - Allows you to synchronize the configuration of many systems
 - Can be used to make mass password changes for management processors
 - Templates can be created from scratch, or the configuration of a “donor” system can be imported and deployed to other servers
 - Multiple templates can be combined to form Configuration Plans
 - Configuration can be automatically deployed as new systems are discovered, eliminating the need to make manual configuration changes
 - Configuration changes can be applied real-time, or saved at a template and deployed at a later time/date
 - IBM® Systems Director provides a predefined configuration template to help you quickly configure a BladeCenter chassis resource
 - A configuration template can be exported to an XML file for moving from one IBM® Systems Director system to another
- Best Practices with Configuration Manager
 - Use a Configuration Template to ensure management processors meet the password retention policy
 - When you create a configuration plan, you should verify the order of the configuration templates within the configuration plan and modify accordingly
 - Do not delete predefined configuration plans
 - Delete those configuration templates that are no longer needed in order to save space and prevent them from being used
- Typical questions that client ask when they see a demo of Configuration Manager
 - Q – Can Configuration Templates be deployed to multiple systems concurrently?
A – Yes.
 - Q – Can I create a Configuration Template to change the passwords of all of my management processors?
A – You can create Configuration Templates to change the password of your management processor, but depending on the management processor types, it may require multiple templates (i.e. one for AMM, one for RSA2). As of ISD 6.2.1.1, the IMM password cannot be changed via Configuration Templates. This functionality is due in a future release. The best tool to use for changing the IMM password across multiple systems is ASU (Advanced Settings Utility). Q –

Can I restrict who can create and deploy Configuration Templates?

A – Yes, using IBM Systems Director's role-based security.

- Q – Which configuration template is used to configure an IMM?

A – Server (via CIM protocol)

- Q – Which configuration template is used to configure an RSA2?

A – Stand-alone server

Refer to [<http://it.be.ibm.com/stg/ltu34001>] for an example demo recording and script for this topic.

For a technical overview of Configuration Manager, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.configuration.helps.doc/fqm0_t_cm_configuring_resources.html.

Role-based Security

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Do you have multiple departments that need access to the management tools?
 - Do you need to isolate management of certain servers?
 - Is there “politics” between departments?
 - Do you need to give different levels of access to different personnel?
 - Do you prefer to integrate security with a Directory Server such as Microsoft Active Directory?
- Key Benefits and Differentiating features for Role-based Security
 - Manage auditing
 - View and manage authorized users and groups
 - Assign roles and resources to users
 - Manage user properties
 - Create and modify roles
 - Manage permissions that are grouped within a role
 - Use roles to control access to a system
 - Request access to a system
 - Manage credentials and their associated mappings
- Best Practices with Role-based Security
 - Add domain users to local security groups
 - Create roles based the access requirements of the users
 - Assign roles to local security groups
 - Use LDAP integration where possible
- Typical questions that client ask when they see a demo of Role-based Security

- Q – Can I integrate user authentication into Microsoft Active Directory?
A – Yes. You can either configure IBM Systems Director to authenticate Microsoft Active Directory using LDAP, or add MS-AD users to local groups.
- Q – Can I restrict who can log in to the IBM Systems Director Console?
A – Yes. Either add a user to one of the existing security groups, or create new security groups and authorize them. Q – Can I restrict what tasks a user can perform?
A – Yes, using role based security.
- Q – Can I restrict what systems a user can manage?
A – Yes. For each user group, you can specify the scope of access based on resource groups within IBM Systems Director.

Refer to [<http://lt.be.ibm.com/stg/ltu34003>] for an example demo recording and script for this topic.

For a technical overview of IBM Systems Director Security, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.security.helps.doc/fqm0_c_security.html.

Resource Monitors and Thresholds

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Do your users complain about application or server performance?
 - Do you currently have a solution for monitoring the utilization of your servers?
 - Do you understand your current server utilization?
- Key Benefits and Differentiating features for Resource Monitors and Thresholds
 - Provides real-time status and quantitative data for specific properties and attributes of resources in your environment
 - Allows the creation of user-specified thresholds for the monitors
 - Thresholds can be created automatically when creation Automation Plans
- Best Practices with Resource Monitors and Thresholds
 - Only create thresholds for critical server resources
 - Avoid duplication of thresholds (note: the Platform Agent has a default monitor for available disk space)
 - Do not create thresholds if you do not plan to take some action when the alert is generated
- Typical questions that client ask when they see a demo of Resource Monitors and Thresholds
 - Q – What resources can I create thresholds for?
A – It depends on the OS. For AIX and Linux, you can create thresholds for the

common monitors, including CPU, Memory, Disk, and Network. For IBM i, you can monitor and set thresholds on many of the same metrics available in Management Central. For Windows, you can create thresholds for any monitor available in PerfMon.

- Q – I don't see some of the items I think should be available. Where are they?
A – If an available resource isn't available, you may need to first create a Monitor Group, then view the resource within the monitor group.
- Q – Is there a way to avoid being notified of temporary spikes in utilization?
A – Yes. Most thresholds have a duration setting that is designed to eliminate notification of temporary spikes.
- Q – Can I temporarily suspend the monitoring?
A – No, but you can suspend the notification. If you have known time periods of high utilization, you can create Event Filters that ignore that time frame, and thus prevent the notification as well. You can also disable a threshold without deleting it.

Refer to [<http://lt.be.ibm.com/stg/ltu34000>] for an example demo recording and script for this topic.

For a technical overview of Resource Monitors, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.status.help.doc/fqm0_t_monitoring_health_and_status.html.

Static and Dynamic Groups

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Do you have a difficult time identifying systems based on application, location, or responsibility?
 - Do you have a need to visualize the relationships between virtual and physical servers, or the relationships between BladeCenter Chassis and Chassis components?
 - Would you like to restrict access to systems based on application, location, or responsibility?
- Key Benefits and Differentiating features for Static and Dynamic Groups
 - Allows you to organize logical sets of resources into groups
 - Groups can be automatically populated based on resource attributes or inventory information
 - Console access can be limited to certain groups of resources
 - You can use groups to easily identify and categorize new resources when they are discovered
 - You can schedule tasks to run on groups of resources
 - Groups can include resources.

- Groups can include other groups.
- Resources can belong to multiple groups.
- Best Practices with Static and Dynamic Groups
 - Keep it simple. Do not create groups that will contain only one or two systems.
 - Only create groups if the members will be managed uniquely, based on access, updates, thresholds, administrator responsibilities, or time zones.
 - Use existing system groups when possible
 - Nest groups to minimize clutter
 - Create personal groups when groups are not needed for all Console users
- Typical questions that client ask when they see a demo of Static and Dynamic Groups
 - Q – Is there a limit to the number of groups that are created?
A – No.
 - Q – How to I see the relationships between my resources?
A – Depending on the resource, there are several system groups that show the relationships. This includes BladeCenter Chassis and Members, IVM or HMC and Managed Power Systems Servers ,Servers with Service Processors, and Virtual Servers and Hosts.

Refer to [<http://t.be.ibm.com/stg/tu34002>] for an example demo recording and script for this topic.

For a technical overview of Static and Dynamic Groups, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.console.helps.doc/fqm0_tgm_managing_groups.html.

Management Processor Launch in Context (LiC) (System x)

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - How many BladeCenter Chassis do you have deployed in your environment?
 - How do you keep track of the BladeCenter Chassis?
- Key Benefits and Differentiating features for Management Processor LiC
 - Provides the ability to launch the Web Browser access against the management processor
 - Eliminates the need to memorize IP addresses or hostnames of management processors
- Best Practices with Management Processor LiC
 - Use the Management Processor LiC whenever you need to perform more low-level management than is possible natively in IBM Systems Director

- Typical questions that client ask when they see a demo of Management Processor LiC
 - Q – Does using the Management Processor LiC bypass the management processor security?
A – No. The user will still be required to logon using management processor credentials.
 - Q – Can you configure auto-logon to bypass the requirement to specify management processor credentials?
A – No, you must specify management processor credentials.
 - Q – Which management processors support the Management Processor LiC?
A – Those with supported interfaces, including Web-browser access or command line access.

Refer to [<http://lt.be.ibm.com/stg/ltu34005>] for an example demo recording and script for this topic.

Viewing Light Path Diagnostics (System x)

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Do you ever visit the data center and see LEDs illuminated on your servers, but don't know what the issue is?
 - Would you like a solution to view the status of the Lightpath Diagnostics LEDs without having to visit the datacenter?
- Key Benefits and Differentiating features for Viewing Lightpath Diagnostics
 - Ability to view each LED to identify whether its associated component is having problems or has failed
 - Allows IBM Systems Director Console users to view Lightpath Diagnostics status, without granting them specific access to the management processors.
 - Light-path-diagnostic LED information consists of the LED name and severity, its state, color, and location.
- Best Practices with Viewing Lightpath Diagnostics
 - View the lightpath diagnostics status to correlate the Active Status of a server with the LED that illuminated
 - Helps eliminate surprises when walking thru the datacenter
- Typical questions that client ask when they see a demo of Viewing Lightpath Diagnostics
 - Q – I don't understand what the lightpath diagnostics table is showing me. Can you explain?
A – The important column is LED State. This identifies LEDs that are illuminated.

If they are illuminated, the LED Severity column indicates the severity of the event that caused the LED to be illuminated.

- Q – Do I need a management processor ID to view the lightpath diagnostics status?

A – No. You simply need access to IBM Systems Director, and have a Role that permits you to view the lightpath diagnostics status for the desired resource.

Refer to [<http://lt.be.ibm.com/stg/ltu34006>] for an example demo recording and script for this topic.

For a technical overview of Viewing Lightpath Diagnostics, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.systemx_b.c.helps.doc/fqm0_t_x_bc_using_light_path_diagnostic_leds.html.

Viewing the Hardware Log (System x)

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - Do you have a corporate policy concerning retention of hardware error logs?
 - Are you searching for an easy, integrated method of viewing the hardware error logs on remote servers?Do you see benefit in the ability to remotely clear the hardware log?
- Key Benefits and Differentiating features for Viewing the Hardware Log
 - The hardware log can include the source of hardware-related events, severity, date and time, and text descriptions of the log entries.
 - You can view and clear hardware-log information using the IBM Systems Director Web interface.
 - Hardware-log information is provided using in-band communication or out-of-band communication, depending on your system hardware and configuration, allowing hardware logs to be viewed even on those rack-mount servers that do not have network connections to the management processor.
 - You can clear the hardware-log information on the Remote Supervisor Adapter or management module and therefore from the Hardware Log page.
- Best Practices with Viewing the Hardware Log
 - Be patient! Viewing the Hardware Log retrieves a significant amount of data from the management processor, and can take a while to process.
 - Export the Hardware Log to a CSV file to create an archive of events.
 - You can remotely clear the Hardware Log to turn off the Lightpath Diagnostic LED that gets illuminated when the log gets full.
- Typical questions that client ask when they see a demo of Viewing the Hardware Log

- Q – Do I need a management processor ID to view the Hardware Log?
A – No. You simply need access to IBM Systems Director, and have a Role that permits you to view the lightpath diagnostics status for the desired resource.
- Q – Can I remotely clear the Hardware Log?
A – Yes.
- Q – Can I save the contents of the Hardware Log?
A – Yes, by exporting it to a CSV file.
Q – Why would I want to look at the Hardware Log?
A – Occasionally, IBM Systems Director displays an alert, but the source of the alert doesn't provide sufficient detail to make the alert condition obvious. By viewing the Hardware Log, you can get a better description of the failed or failing component.

Refer to [<http://lt.be.ibm.com/stg/ltu34004>] for an example demo recording and script for this topic.

For a technical overview of using hardware-log information, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.systemx_b.c.helps.doc/fqm0_t_x_bc_using_hardware_log_information.html.

Hardware Management Console Extended Management (Power Systems)

- Questions to engage client to validate value of capability in solving an existing problem or benefit you suspect but they have not articulated
 - How many Hardware Management Consoles (HMCs) do you have deployed in your environment?
 - How often must you login to your HMCs daily?
 - Do you spend a lot of time keeping track of which HMC to use when managing Power Systems?
- Key Benefits and Differentiating features for HMC Extended Management
 - Provides the ability to execute detailed native HMC tasks from the Systems Director interfaces
 - Simplifies the management of individual LPARs and CECs in a complex virtualized Power Systems environment
 - Provides direct access to the specific HMC task dialogs for each manage resource type.
- Best Practices with HMC Extended Management
 - Use the HMC Extended Management whenever you need to perform lower-level management than is possible natively in IBM Systems Director
 - The Web browser system must be able to resolve the hostname of the HMC and reach it on the network for HMC Extended Management to function properly

- Typical questions that client ask when they see a demo of HMC Extended Management
 - Q – Will I need to use HMC Extended Management for all Power Systems virtualization tasks?
 - A – No. Many tasks are available natively in the IBM Systems Director interface (even though the task still uses the HMC under the covers).
 - Q – Will I need to cache my HMC credential information to use this function?
 - A – Yes, you will need to cache the credential information, otherwise, IBM Systems Director will bring up the HMC login screen.
 - Q – Will my cached credential be used for all IBM Systems Director users? This is invalid under my companies security and auditing policy!
 - A – No, you can configure a one-for-one mapping of IBM Systems Director credential with the HMC login credential, allowing full auditing on the HMC of executed tasks.
 - Q – Do I still need an HMC if I have IBM Systems Director? It seems like this has all the functionality I need natively.
 - A – Yes, you still need a HMC because the native tasks that act upon a CEC or LPAR work through the HMC under the covers using the HMC's SSH and CIM protocols.

Refer to [ENTER URL] for an example demo recording and script for this topic.

For a technical overview of HMC Extended Management, refer to the InfoCenter at http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.power.hel ps.doc/fqm0_t_managing_hmc_ivm.html.

Additional Recommended Activities

In addition to reviewing these demos and practicing in the demo environment it is highly recommended that the first time a technical sales resource does a solo demo that they participate in a demo with an experienced resource who has done several successful demo including experienced Blackbelts, Lab services subject matter experts or brand resources.

Appendix:

Systems Director Environment – Resource Descriptions:

- **Global ISD Server**
 - > VM 2 vCPU, 16GB memory, 100GB Disk
 - > Windows
 - > IBM Systems Director
 - > DB2 Database
 - > HMS demo
- **Domain ISD Server – Power**
 - > LPAR 4-core, 3.77 GHz, 32GB memory, 100GB Disk
 - > AIX
 - > IBM Systems Director
 - > Service and Support Manager
 - > Active Energy Manager
 - > VMControl Enterprise Edition
 - > Storage Control
 - > DB2 Database
 - > ISD on Power demo
- **Domain ISD Server – x86**
 - > VM 2 vCPU, 16GB memory, 100GB Disk
 - > Windows
 - > IBM Systems Director
 - > Service and Support Manager
 - > Active Energy Manager
 - > VMControl Enterprise Edition
 - > Storage Control
 - > DB2 Database
 - > ISD on x86 demo
- **Managed BladeCenter Chassis and Blades**
 - > x86 and Power Blades
 - > IVM, AIX, Linux on Power, Linux on x86, Windows
 - > Power and x86 targets, AEM target
- **Power HMC, Power System A and B**
 - > 6GB RAM
 - > Two VIOS LPARs per CEC
 - > NPIV-capable HBAs (at minimum, one per VIOS)
 - > PowerVM Enterprise Edition
 - > AIX, IBM i OS LPAR (sacrificial)
 - > AEM target, VMControl target (discovery, VM relocation, image management and system pools target)
- **vCenter Server, Virtualized x86 A and B**
 - > VMware ESXi

- > Linux and Windows VMs (sacrificial)
- > AEM target, VMControl target (VM relocation)
- **SAN Volume Controller**
 - > Storage Control target
- **NIM Server**
 - > Used by VMControl Standard Edition for image management