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Leveraging Situations Across Multiple ITM / OMEGAMON Environments

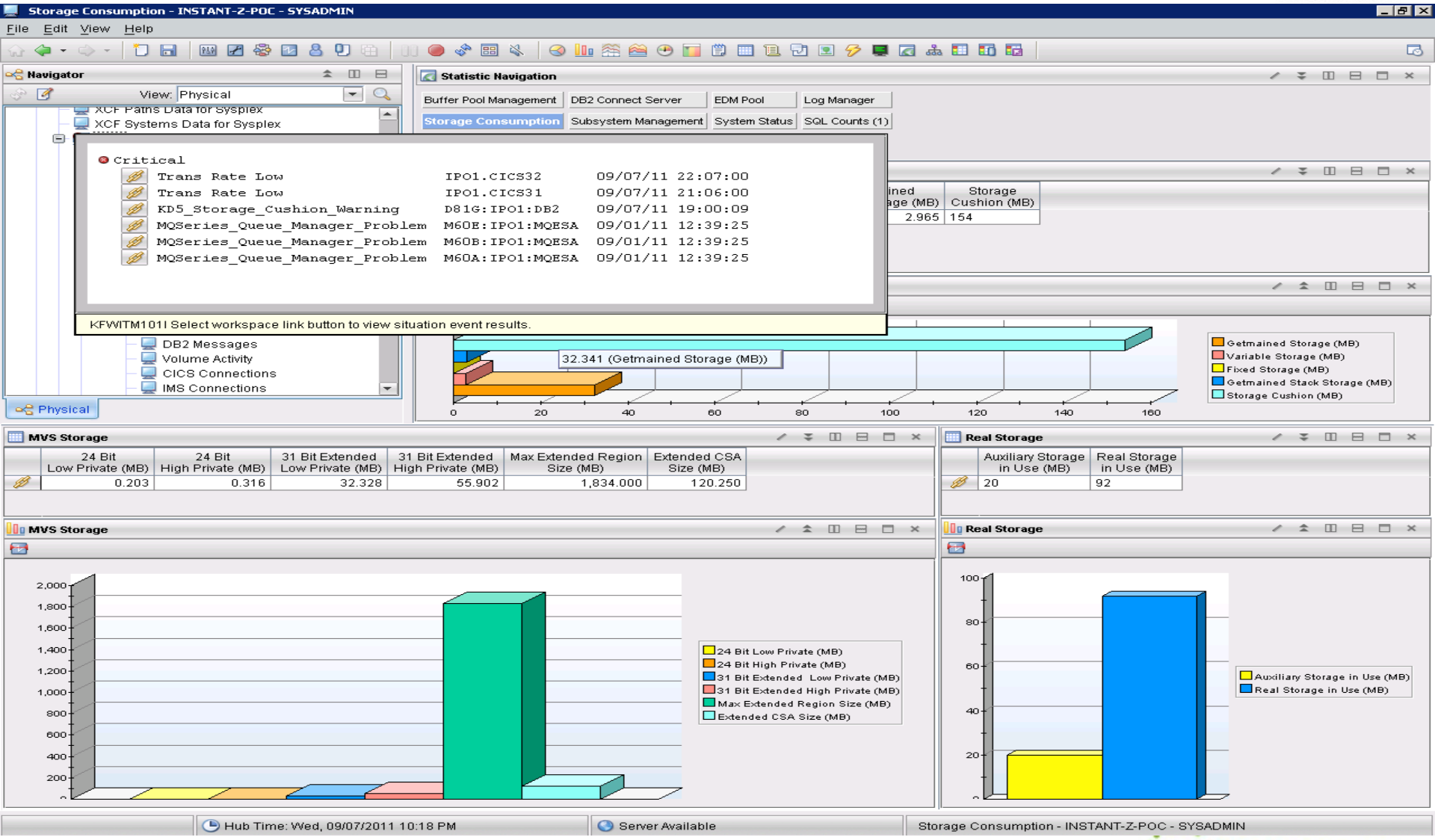
Wayne Bucek
IBM
March 13, 2012
Session Number 10881

IBM

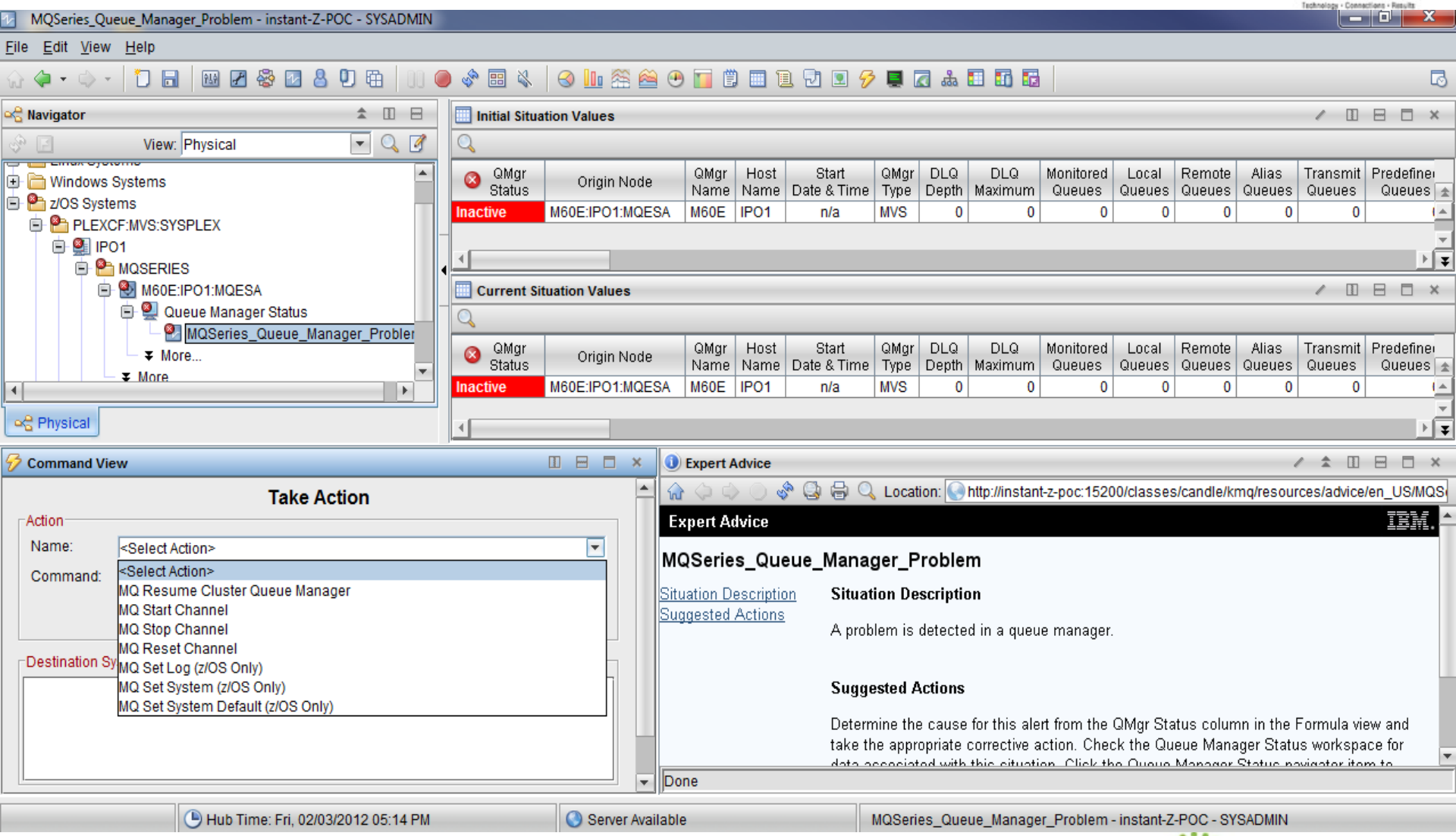
Agenda

- Why Migrate Situations
- OMEGAMON XE Architecture
- Installation Aspects
- Mechanics of Situation Migration

What are Situations?

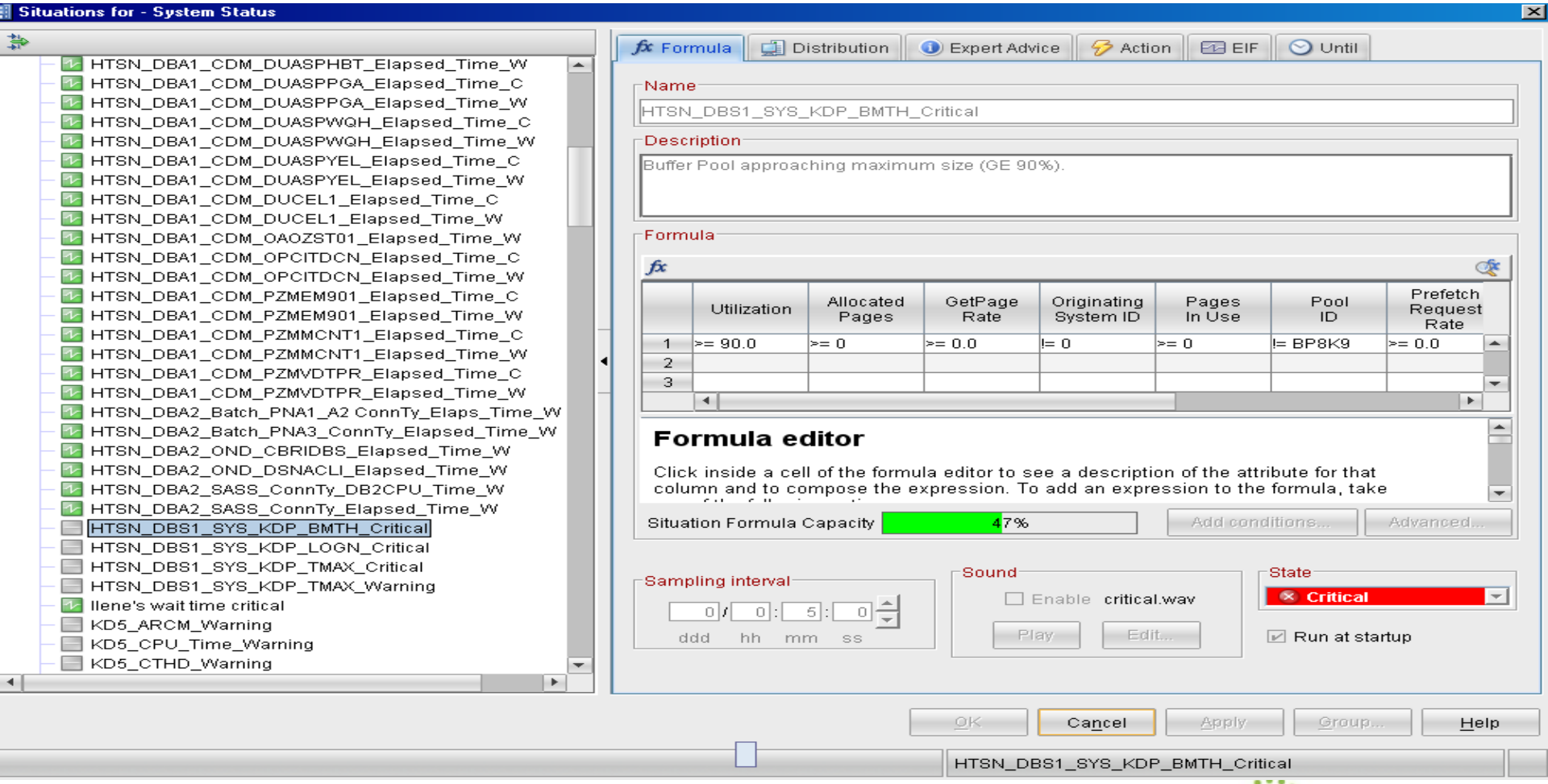


Event Management Workspace



Situation Definition

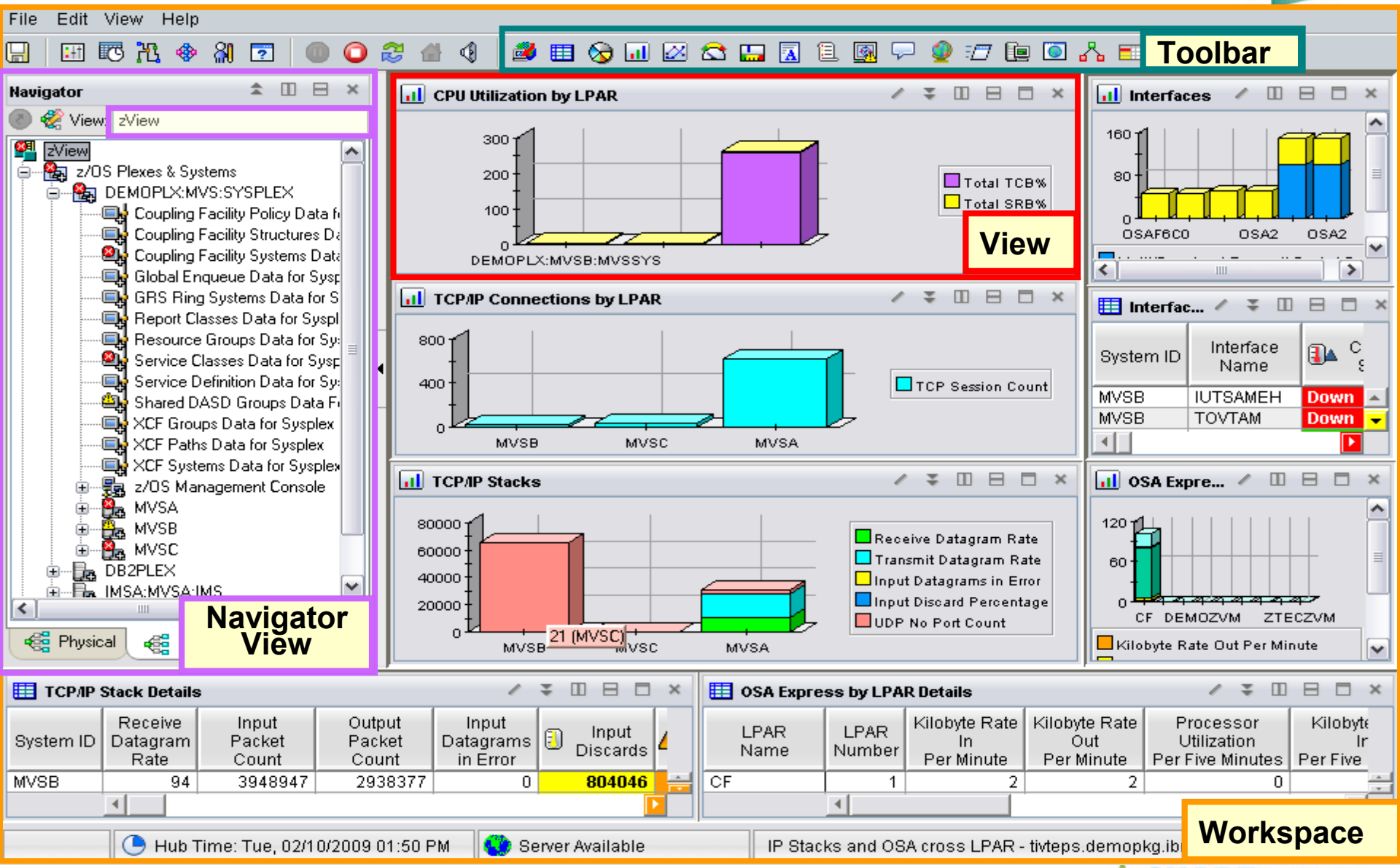
- Proactive alerts
- Product Provided Situations
- Custom Situations
- Export supported via utility



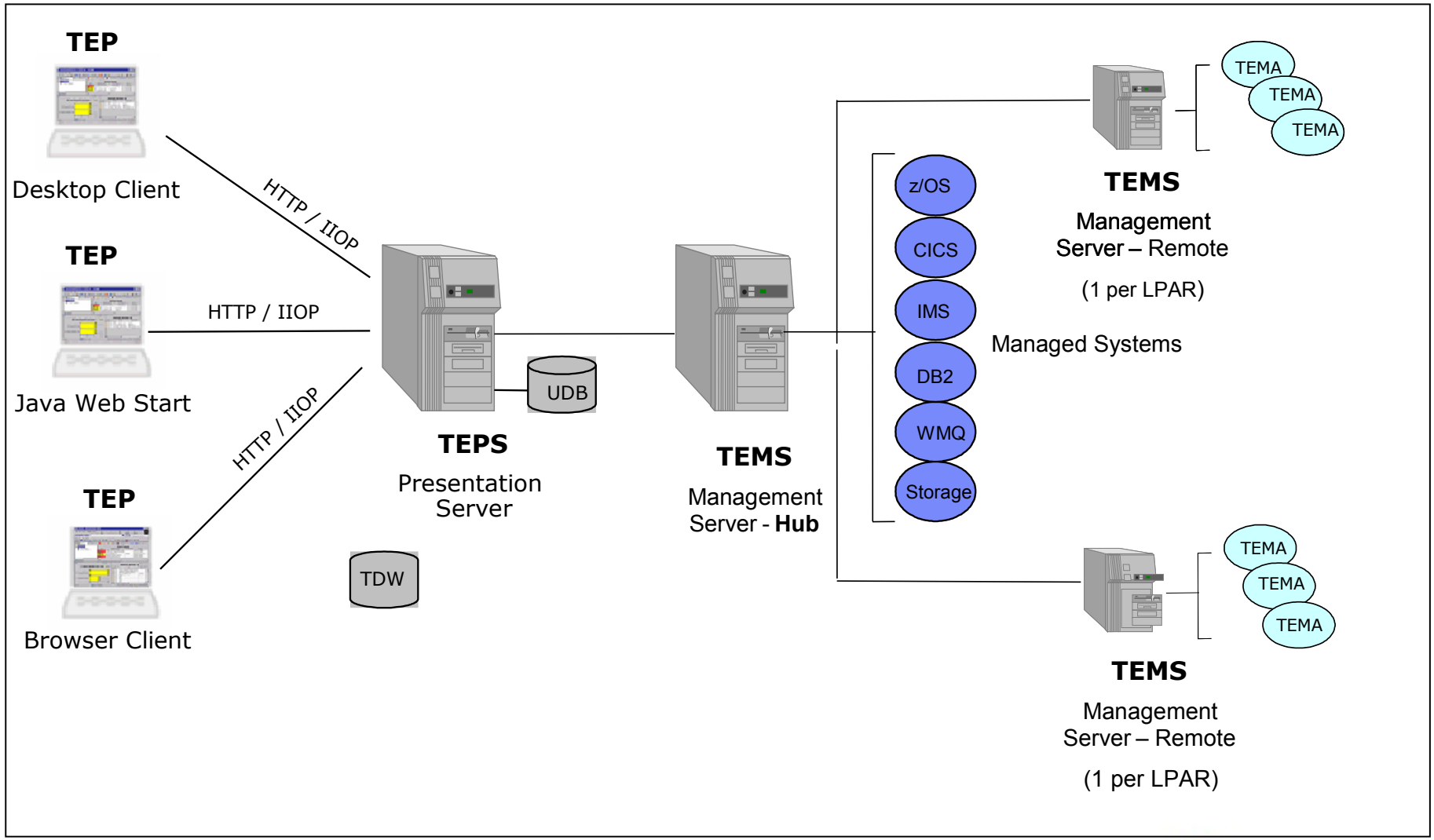
Situation Migration

- Moving ITM constructs across environments
- Large installations with multiple installed environments.
  - Suited for a common core group of situations
  - Huge productivity gains through reuse
- Development and deployment methodology
  - Would you develop a business application without moving the code through a development lifecycle?
  - Situations are no different

TEP - Terminology

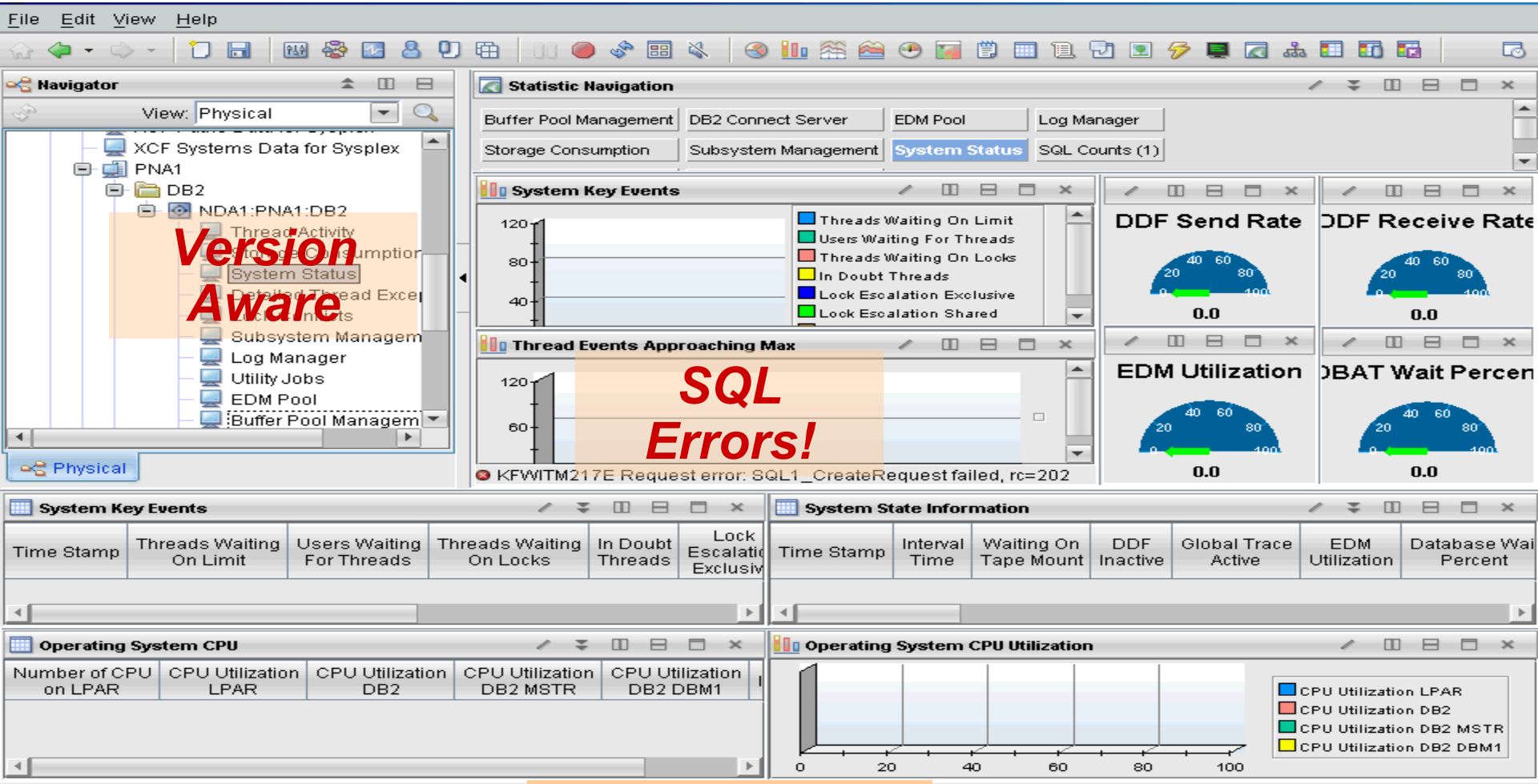


OMEGAMON Architecture



Within A Single OMEGAMON Environment

- CAT / ATR files
- Version of agents
- Mixed bag OK!
- Multi-Agent versioning support



Improved in v510

Implementation Aspects

- Application Support
- Match z/OS agent version
- New attribute → SMP/e PTF
- Corresponding fixpack to Application Support

Locating ITM Workspace Application Support Files for z/OS Agents

Technote (troubleshooting)

Problem(Abstract)

This technote addresses the commonly asked question of where can workspace application support files be found for z/OS Agents.

Resolving the problem

Before you can view data collected by monitoring agents, you must install application support for the agents on the Tivoli Enterprise Portal Server and on the hub Tivoli Enterprise Monitoring Server. When you install application support on the Tivoli Enterprise Portal Server, you are installing the files required for presenting workspaces and online help for each monitoring agent. When you install application support on the hub monitoring server, you are installing the files required for product-provided situations, situation distributions, and other product-specific data. Installing application support on the hub monitoring server is also known as "seeding" the hub.

Most z/OS-based agents provide application support files on CDs or DVDs, which are separate from the mainframe installation media. Distributed agents include their application support files in the distributed installation process. Each CD /DVD that contains application support files is listed below, with information about which products use the CD /DVD and where the CD / DVD can be found. The latest level in fulfillment is the CD /DVD on this list. Where possible, IBM provides both .zip and .tar formats, as well as .iso format, so that a physical CD / DVD can be created.

Please note that the IBM Tivoli Monitoring (ITM) media is separate from the workspace application support files which are included with products that run in the ITM environment. ITM can be obtained by ordering either 5724-C04 IBM Tivoli Monitoring through Passport Advantage or the no charge 5698-A79 IBM Tivoli Management Services on z/OS through Shop zSeries. Your IBM rep can ask Techline to configure and submit the order as well. 5698-A79 includes the server, engine, and configurator on z/OS. Workspace application support files may have their own fixpacks which are separate and distinct from any ITM fixpacks. Fixpacks can be found on the product support urls at: http://www-306.ibm.com/software/support/index_A_Z.html.

The LCD7-2600-00 IBM Tivoli OMEGAMON Data Files for z/OS is the latest level available of the application support DVD for the OMEGAMON XE V5.1 products. This DVD contains application support files for the following products:

Document information

Tivoli OMEGAMON XE on z/OS

Software version:

4.1.0, 4.2

Operating system(s):

Windows, z/OS

Reference #:

1255545

Modified date:

2011-04-21

Translate my page

Select Language

Availability notice

→ Alert: Access to entitled documents will be temporarily unavailable during September 10 - 11

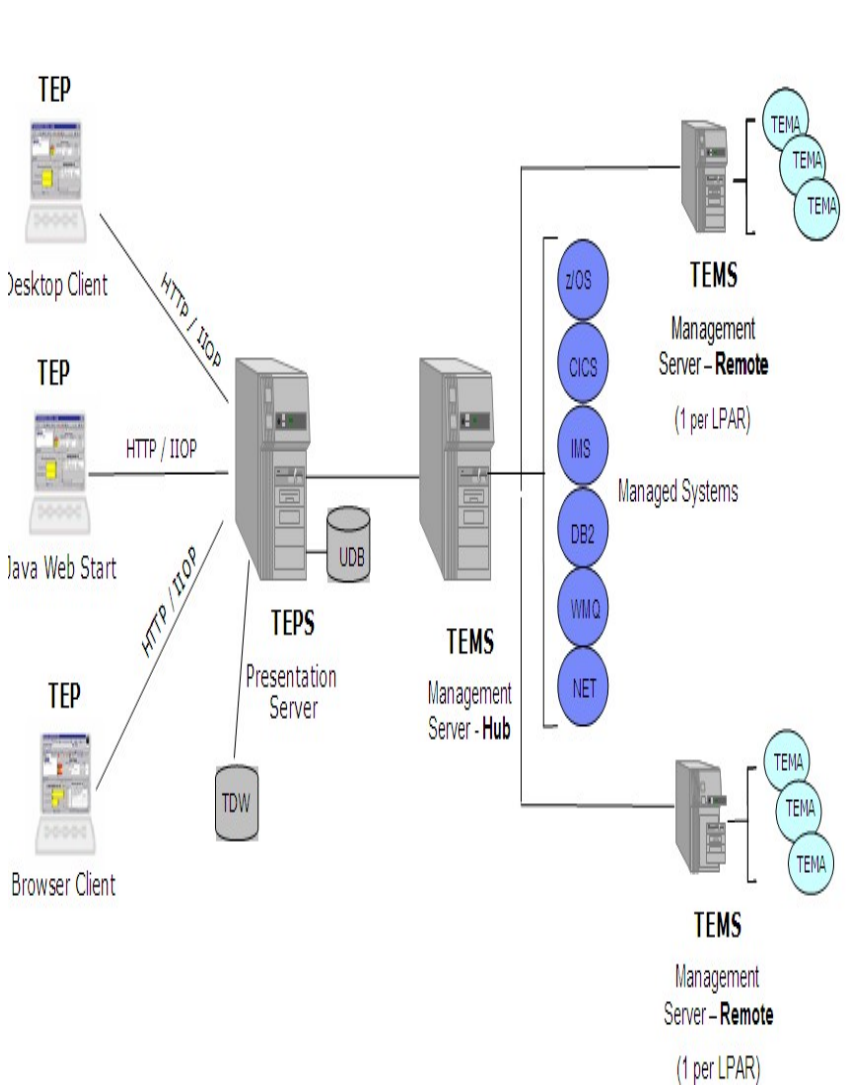
Implementation Aspects

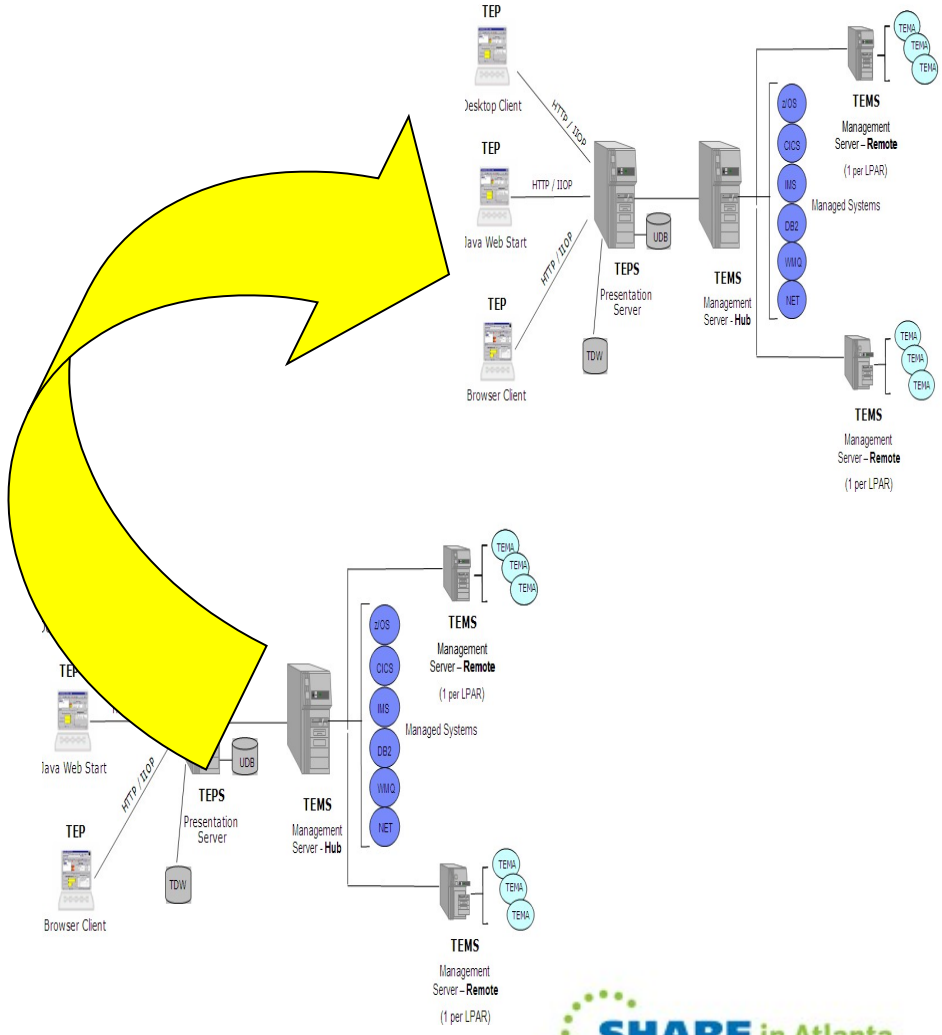
- Fixpack description
- Read me
- PTF Hold Data
- Cross referenced information
- Needed until SDA available

```
================================================================================
1.3 Backward compatibility with prior version of this product
================================================================================

This maintenance update requires installation of IBM Tivoli OMEGAMON XE
for DB2 Performance Expert (Monitor) V510 PTF as follows:

UK69486
```

```
 File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
VIEW       PKG.HEADERS.DATA(UK69486) - 01.00            Columns 00001 00072
Command ===>                                             Scroll ===> CSR
000496 ** HOLD(UK69486) SYS FMID(HKDB510) REASON(DOWNLD) DATE(11187)
000497    COMMENT
000498     (*****************************************************************
000499      * FUNCTION AFFECTED: OMEGAMON XE for DB2 PE and PM              *
000500      *                    TEMS, TEPS, TEP on distributed platforms   *
000501      *****************************************************************
000502      * DESCRIPTION      : TEP fixpack download                       *
000503      *****************************************************************
000504      *                                                               *
000505      * Note: This download action does not apply to users of         *
000506      * Data Studio Workbench feature.                                *
000507      *                                                               *
000508      * The IBM Software Support Web site provides the latest         *
000509      * information about fixpacks. You can view this information     *
000510      * on the following Web site:                                    *
000511      * http://www-306.ibm.com/software/sysmgmt/products/support/     *
000512      *                                                               *
000513      * The latest fixpack 5.1.0-TIV-KD5-IF0001                       *
000514      * which is prerequisite for this PTF is also available          *
000515      * from this Web site.                                           *
MA    a                                                              04/015
```

Compatible Environments





Leveraging Situations Across Environments

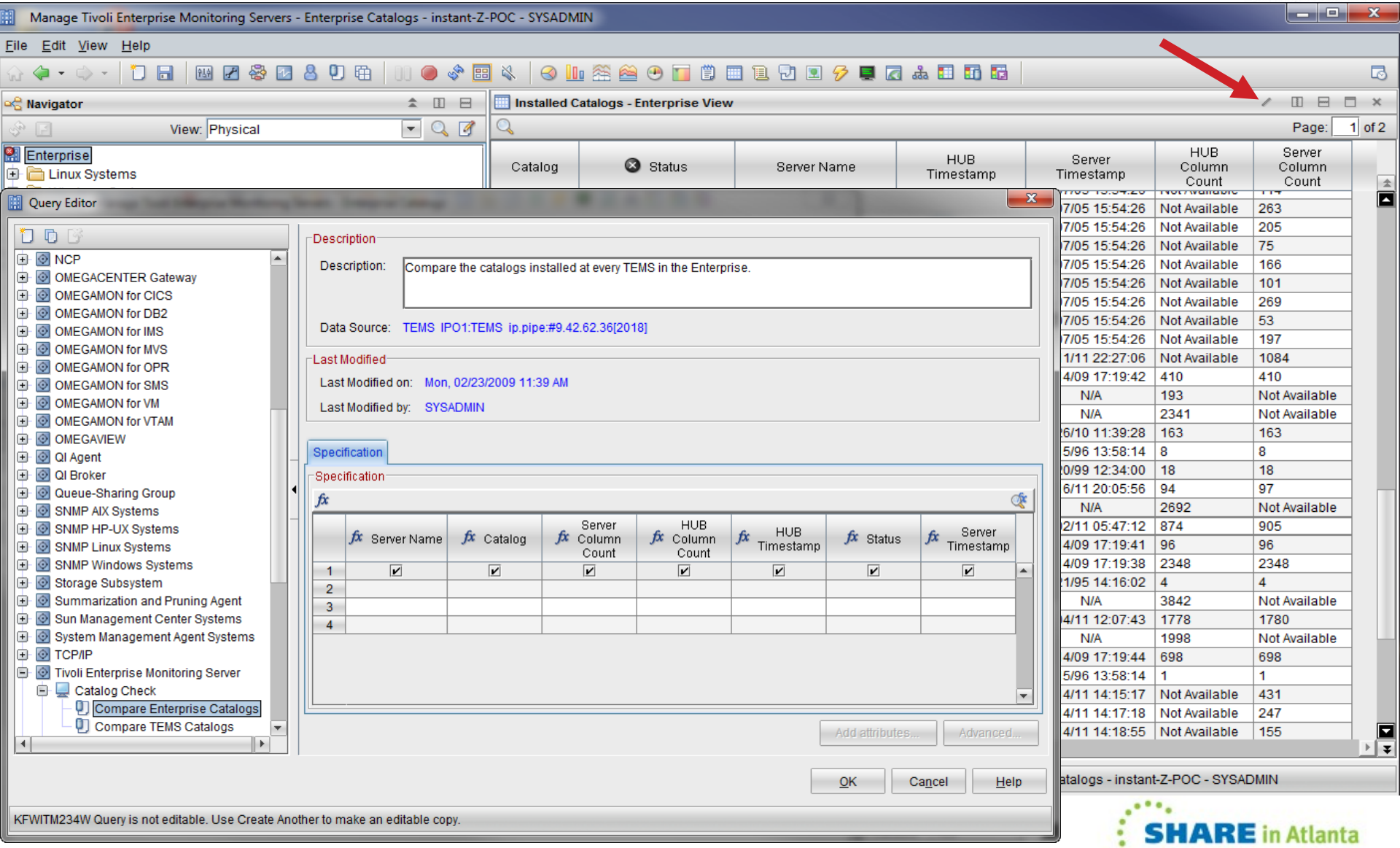
- Great productivity gain
- Technically feasible
- Compatible environments

- Hub-level installation mechanism
- Scalable to 10K endpoints
- Multiple environments not governed by an install mechanism

Procedures to ensure compatible target system!

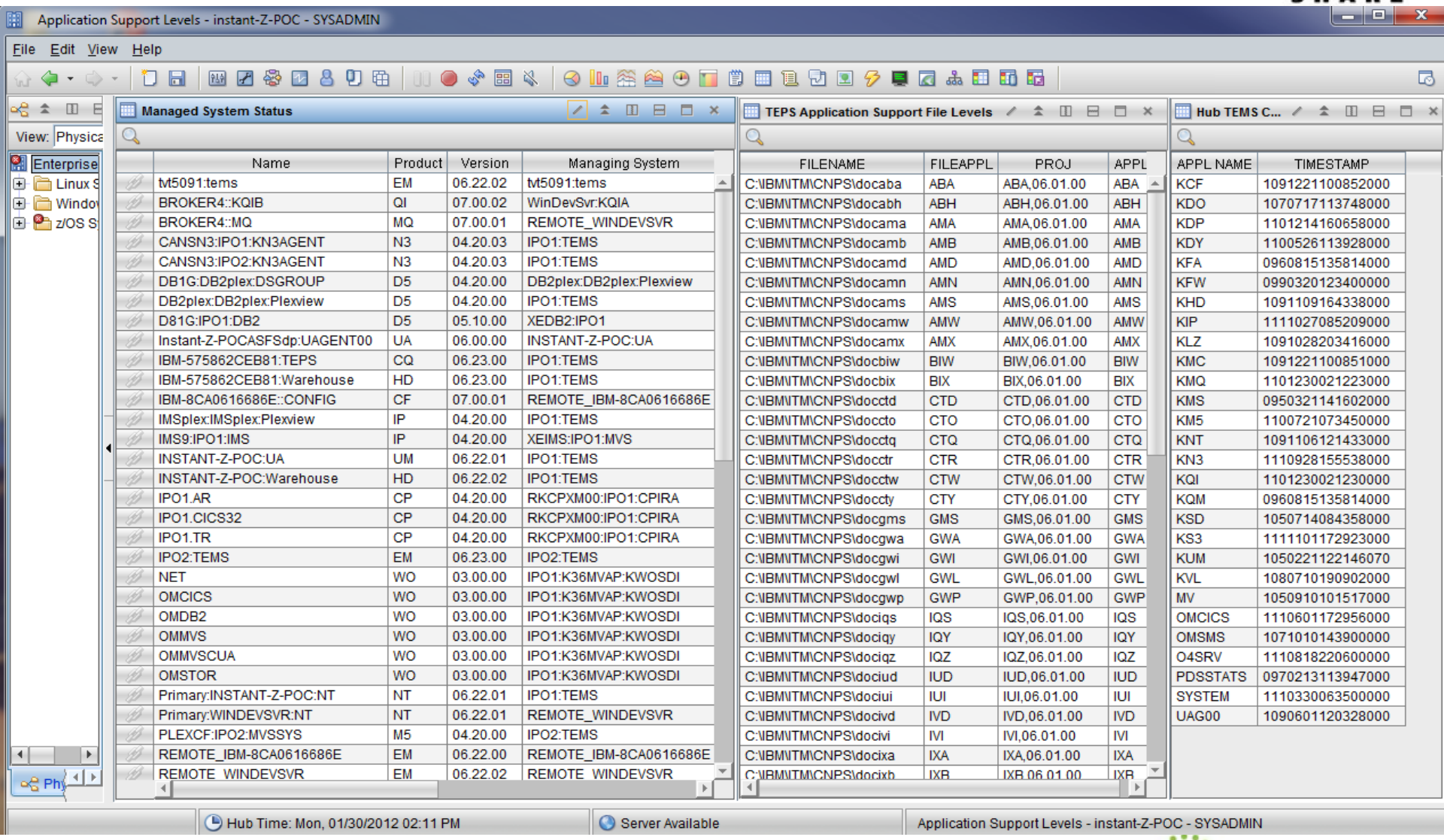
Tools are available

ITM 623 Installed Catalogs

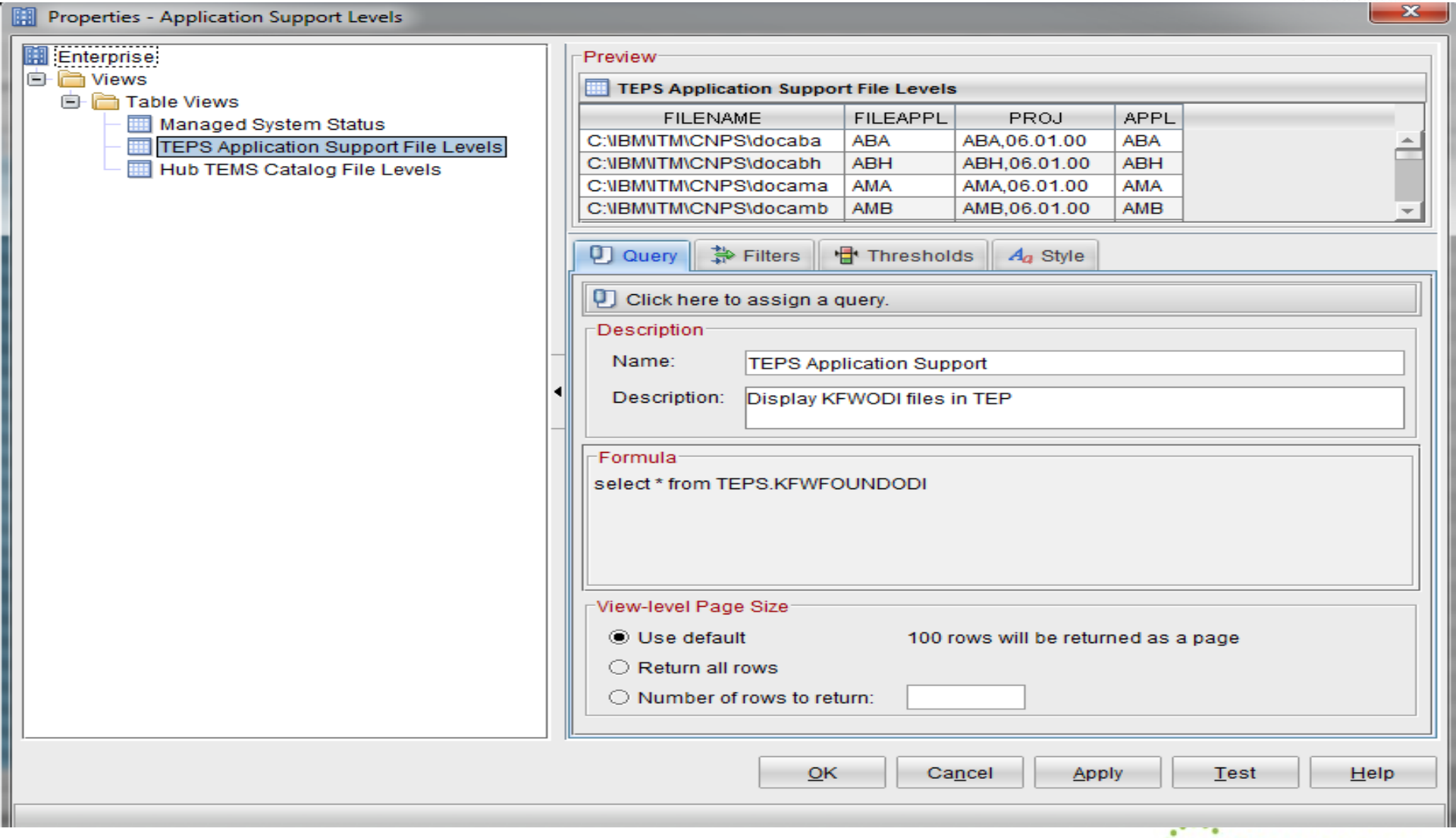


SHARE in Atlanta 2012

Application Support Workspace



Application Support Custom SQL



ITMSuper Configuration Tool

- Green – In Sync
- Yellow – Missing at Hub
- Red – Missing at TEPS

TEPS Applications Versions

Application	Application ID	Version	TEPS File Date	TEPS Seed Date	HUB Date
ABA	ABA	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:34 CDT 2011	Missing at HUB
ABH	ABH	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:35 CDT 2011	Missing at HUB
AMA	AMA	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:3	
AMB	AMB	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:3	
AMD	AMD	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:3	
AMN	AMN	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:3	
AMS	AMS	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:3	
AMW	AMW	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:3	
AMX	AMX	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:3	
BIW	BIW	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:3	
BIX	BIX	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:38 CDT 2011	Missing at HUB
CTD	CTD	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:39 CDT 2011	Missing at HUB
CTO	CTO	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:40 CDT 2011	Missing at HUB
CTQ	CTQ	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:42 CDT 2011	Missing at HUB
CTR	CTR	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:42 CDT 2011	Missing at HUB
CTW	CTW	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:43 CDT 2011	Missing at HUB
CTY	CTY	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:43 CDT 2011	Missing at HUB
GMS	GMS	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:44 CDT 2011	Missing at HUB
GWA	GWA	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:44 CDT 2011	Missing at HUB
GWI	GWI	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:44 CDT 2011	Missing at HUB
GWL	GWL	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:45 CDT 2011	Missing at HUB
GWP	GWP	06.01.00	Sun Jun 12 02:02:17 CDT 2011	Sat Jun 11 20:22:45 CDT 2011	Missing at HUB
IQS	IQS	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:46 CDT 2011	Missing at HUB
IQY	IQY	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:47 CDT 2011	Missing at HUB
IQZ	IQZ	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:47 CDT 2011	Missing at HUB
IUD	IUD	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:48 CDT 2011	Missing at HUB
IUI	IUI	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:48 CDT 2011	Missing at HUB
IVD	IVD	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:48 CDT 2011	Missing at HUB
IVI	IVI	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:49 CDT 2011	Missing at HUB
IXA	IXA	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:49 CDT 2011	Missing at HUB
IXB	IXB	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:49 CDT 2011	Missing at HUB
IXT	IXT	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:50 CDT 2011	Missing at HUB
IYM	IYM	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:50 CDT 2011	Missing at HUB
IZY	IZY	06.01.00	Sun Jun 12 02:02:16 CDT 2011	Sat Jun 11 20:22:51 CDT 2011	Missing at HUB
KA4	KA4	6.2.0	Sun Jun 12 02:00:34 CDT 2011	Sat Jun 11 20:22:15 CDT 2011	Missing at HUB
KCF	KCF	7.0.1	Sun Jun 12 02:44:10 CDT 2011	Sat Jun 11 20:46:45 CDT 2011	08/15/08 23:28:51
KDP	KDP	5.1.0	Sun Jun 12 02:31:48 CDT 2011	Sat Jun 11 20:35:29 CDT 2011	09/23/09 18:51:10
KDY	KDY	01.00.00	Sun Jun 12 02:00:45 CDT 2011	Sat Jun 11 20:22:16 CDT 2011	Missing at HUB
KGW	KGW	4.2.0	Sun Jun 12 02:56:33 CDT 2011	Sat Jun 11 21:02:19 CDT 2011	Missing at HUB
KHD	KHD	6.2.2	Sun Jun 12 02:01:01 CDT 2011	Sat Jun 11 20:22:16 CDT 2011	Missing at HUB
KIP	KIP	4.2.0	Sun Jun 12 02:56:35 CDT 2011	Sat Jun 11 21:02:33 CDT 2011	08/14/09 15:36:11
KLZ	KLZ	6.2.0	Sun Jun 12 02:02:04 CDT 2011	Sat Jun 11 20:22:20 CDT 2011	Missing at HUB
KM5	KM5	4.2.0	Sun Jun 12 02:56:38 CDT 2011	Sat Jun 11 21:02:45 CDT 2011	10/28/09 08:26:11
KMC	Missing at TEPS				08/15/08 23:28:50

ITMSuper Configuration Tool

K:CMS	1.515 Seconds V5
No of Apps	= 19
KCF [1]	08/15/08 23:28:51
KDP [1]	09/23/09 18:51:10
KDY [1]	10/03/08 17:30:45
KFA [1]	08/15/96 13:58:14
KFW [1]	03/20/99 12:34:00
KIP [1]	08/14/09 15:36:11
KM5 [1]	10/28/09 08:26:11
KMC [1]	08/15/08 23:28:50
KMQ [1]	12/21/09 10:08:48
KMS [1]	03/21/95 14:16:02
KQI [1]	08/15/08 23:28:53
KQM [1]	08/15/96 13:58:14
KSD [1]	07/14/05 08:43:58
MV [1]	09/10/05 10:15:17
O4SRV [1]	07/11/09 00:00:00
OMCICS [1]	12/26/08 15:07:24
OMSMS [1]	10/10/07 14:39:00
PDSSTATS [1]	02/13/97 11:39:47
SYSTEM [1]	04/02/96 11:17:31

L:CMS	1.578 Seconds V5
No of Apps	= 19
KCF [1]	08/15/08 23:28:51
KDP [1]	09/23/09 18:51:10
KDY [1]	10/03/08 17:30:45
KFA [1]	08/15/96 13:58:14
KFW [1]	03/20/99 12:34:00
KIP [1]	08/14/09 15:36:11
KM5 [1]	10/28/09 08:26:11
KMC [1]	08/15/08 23:28:50
KMQ [1]	12/21/09 10:08:48
KMS [1]	03/21/95 14:16:02
KQI [1]	08/15/08 23:28:53
KQM [1]	08/15/96 13:58:14
KSD [1]	07/14/05 08:43:58
MV [1]	09/10/05 10:15:17
O4SRV [1]	07/11/09 00:00:00
OMCICS [1]	12/26/08 15:07:24
OMSMS [1]	10/10/07 14:39:00
PDSSTATS [1]	02/13/97 11:39:47
SYSTEM [1]	04/02/96 11:17:31

PNA1:CMS	1.406 Seconds V5
No of Apps	= 18
KAH [1]	07/13/09 15:52:08
KCF [1]	11/16/09 03:46:36
KDP [1]	09/16/10 16:37:45
KDY [1]	04/13/09 09:00:08
KFA [1]	08/15/96 13:58:14
KFW [1]	03/20/99 12:34:00
KIP[2574]	Missing
KM5 [1]	07/21/10 07:34:50
KMC [1]	11/16/09 03:46:35
KMQ [1]	11/16/09 03:46:32
KMS [1]	03/21/95 14:16:02
KQI [1]	06/01/10 16:31:55
KQM [1]	08/15/96 13:58:14
KSD[9]	Missing
KSY [1]	01/28/05 04:01:27
MV[17]	Missing
O4SRV [1]	01/08/10 00:00:00
OMCICS [1]	08/18/10 10:27:11
OMSMS [1]	10/10/07 14:39:00
PDSSTATS [1]	02/13/97 11:39:47
SYSTEM [1]	04/02/96 11:17:31

PNA2:CMS	2.765 Seconds V5
No of Apps	= 18
KAH [1]	07/13/09 15:52:08
KCF [1]	11/16/09 03:46:36
KDP [1]	09/16/10 16:37:45
KDY [1]	04/13/09 09:00:08
KFA [1]	08/15/96 13:58:14
KFW [1]	03/20/99 12:34:00
KIP[2574]	Missing
KM5 [1]	07/21/10 07:34:50
KMC [1]	
KMQ [1]	
KMS [1]	
KQI [1]	
KQM [1]	
KSD[9]	Missing
KSY [1]	01/28/05 04:01:27
MV[17]	Missing
O4SRV [1]	01/08/10 00:00:00
OMCICS [1]	08/18/10 10:27:11
OMSMS [1]	10/10/07 14:39:00
PDSSTATS [1]	02/13/97 11:39:47
SYSTEM [1]	04/02/96 11:17:31

PNA3:CMS	0.938 Seconds V5
No of Apps	= 18
KAH [1]	07/13/09 15:52:08
KCF [1]	11/16/09 03:46:36
KDP [1]	09/16/10 16:37:45
KDY [1]	04/13/09 09:00:08
KFA [1]	08/15/96 13:58:14
KFW [1]	03/20/99 12:34:00
KIP[2574]	Missing
KM5 [1]	07/21/10 07:34:50
KSD[9]	Missing
KSY [1]	01/28/05 04:01:27
MV[17]	Missing
O4SRV [1]	01/08/10 00:00:00
OMCICS [1]	08/18/10 10:27:11
OMSMS [1]	10/10/07 14:39:00
PDSSTATS [1]	02/13/97 11:39:47
SYSTEM [1]	04/02/96 11:17:31

- Green – In Sync
- Yellow – Missing at Hub
- Red – Mismatched
- Blue – Missing at Remote

Environment Compatibility

- Change control is crucial
- ITMSuper and custom queries are good tools
  - Manual effort still required
- ITM 623 enhancements
- Custom code to compare environments
  - TACMD CLI, SOAP, Exported reports
  - Process the output

Export Utility

- TACMD
- Authorized user CLI to ITM/OMEGAMON objects
- Bulk Export / Import of Situations
- XML file shared across environments

tacmd bulkExportSit

Description

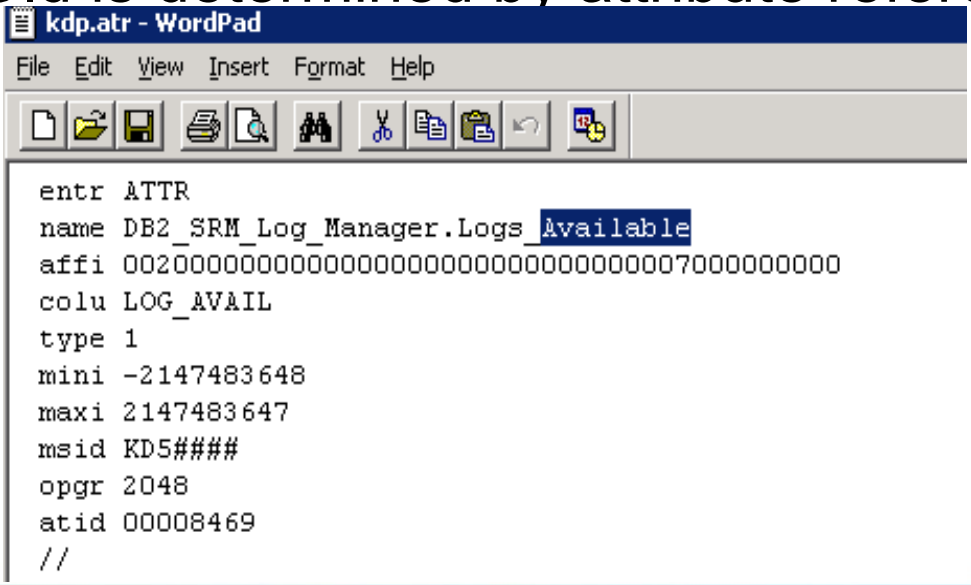
Use the **tacmd bulkExportSit** command to export all the available situations from the Tivoli Enterprise Monitoring Server. You can filter for a specified system type, a list of specified system types, a specified situation name, or a listfile containing situation names. You must log in by using the **login** command before running the **bulkexportsit** command.

CLI syntax

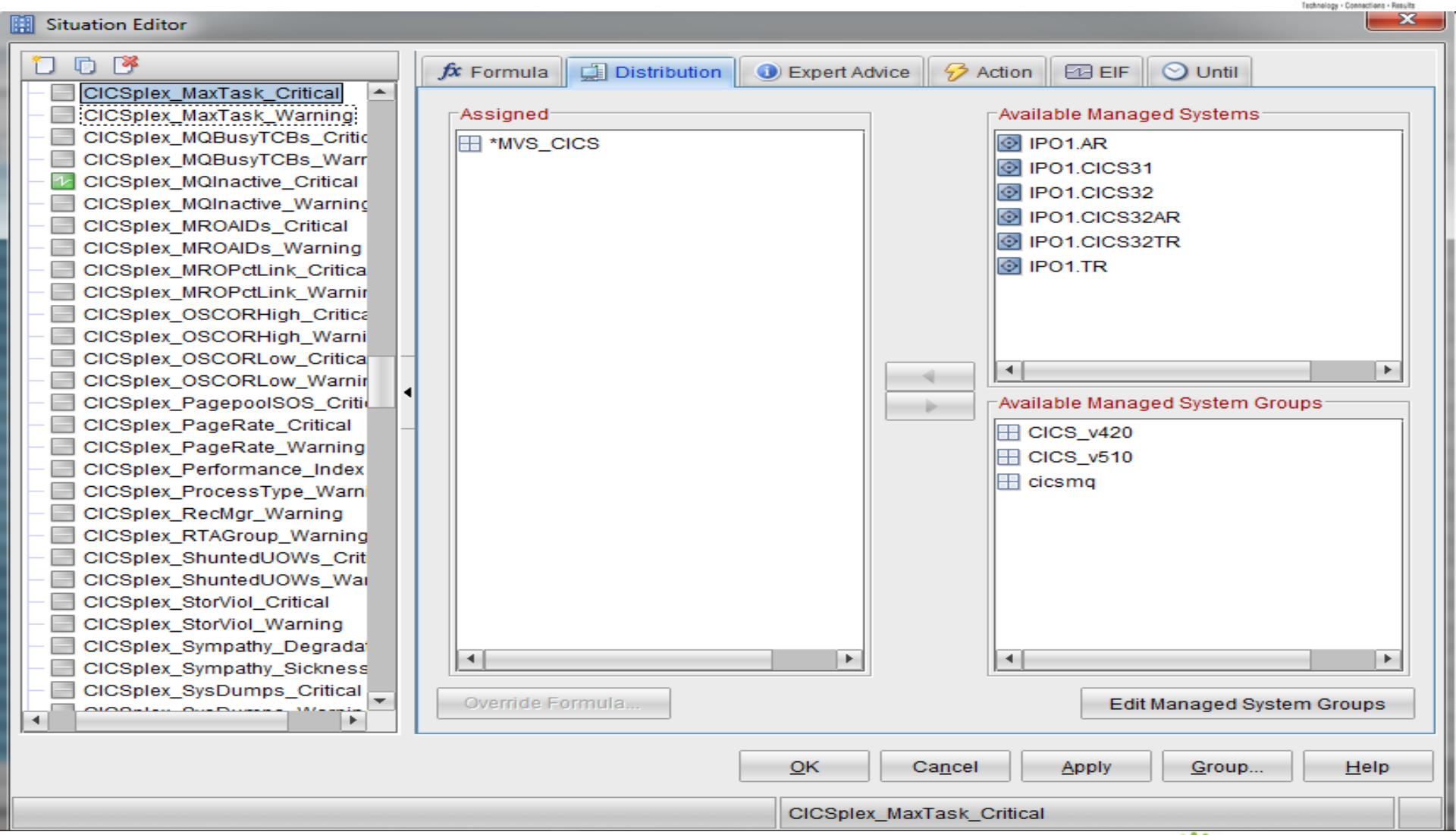
```
tacmd bulkExportSit
                [-p|--path SITUATION_FILEPATH ]
                [-t|--type| --types TYPE]
                [-n|--names SITUATIONNAMES]
                [-d|--distribution]
                [-h|--historical]
                [-f|--force]
tacmd bulkExportSit
                [-p|--path SITUATION_FILEPATH ]
                [-l|--listfile] FILENAME
                [-d|--distribution]
                [-h|--historical]
                [-f|--force]
```

Exported Situation Constraints

- Must follow LCD model
- v.Old Situation *can* run in v.New System
- v.New Situation *cannot* run in v.Old System
- Standard backward compatibility
- One version of the catalog
- Attribute level version designation
- v.New or v.Old is determined by attribute referenced.

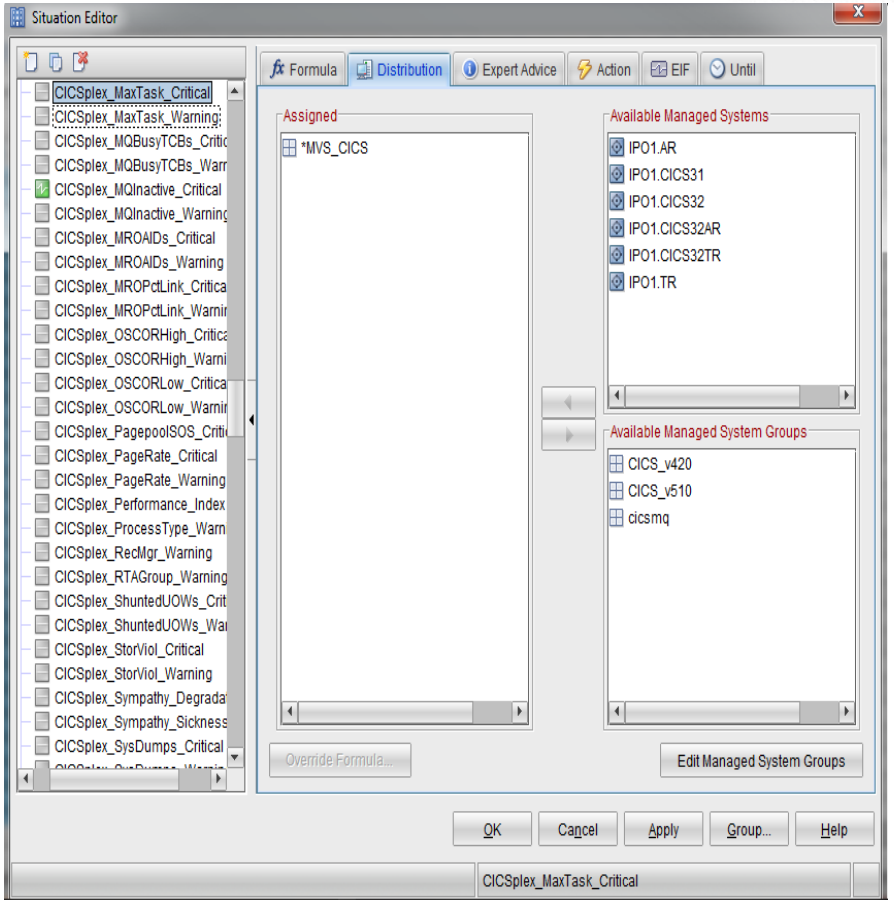


Exploit Managed System Lists



Version Specific MSL's

- Construct MSL's by version
- Distribute situations to MSL
- Assures catalog match
- Utilities to facilitate the process
- Javascript to SOAP server



ITM_MSL_Updater.js /hserver:9.42.62.36 /hu:tech01 /hp:wayne1 /hsport:2020 /halias:soap /patnodl:"IP01.CICS32,CICS_v420;IP01.CICS42,CICSv510"

Summary

- OMEGAMON constructs can be leveraged across the enterprise
- Participating systems must be at compatible levels
- Utilities exist to assist with this process
- Situation LCD
- Procedures must be defined to ensure successful migration of situations across environments.