



COMVERSE
UNIVERSITY

Unified Platform Manager (UPM)

Lesson Objectives

By the end of this lesson you will be able to describe the UPM functionality and the relevant operation for each service:

- Alarm and event
- Job management
- Process management
- File transfer



Agenda



UPM Overview and Concepts

UPM Alarms and Events

UPM Process Management

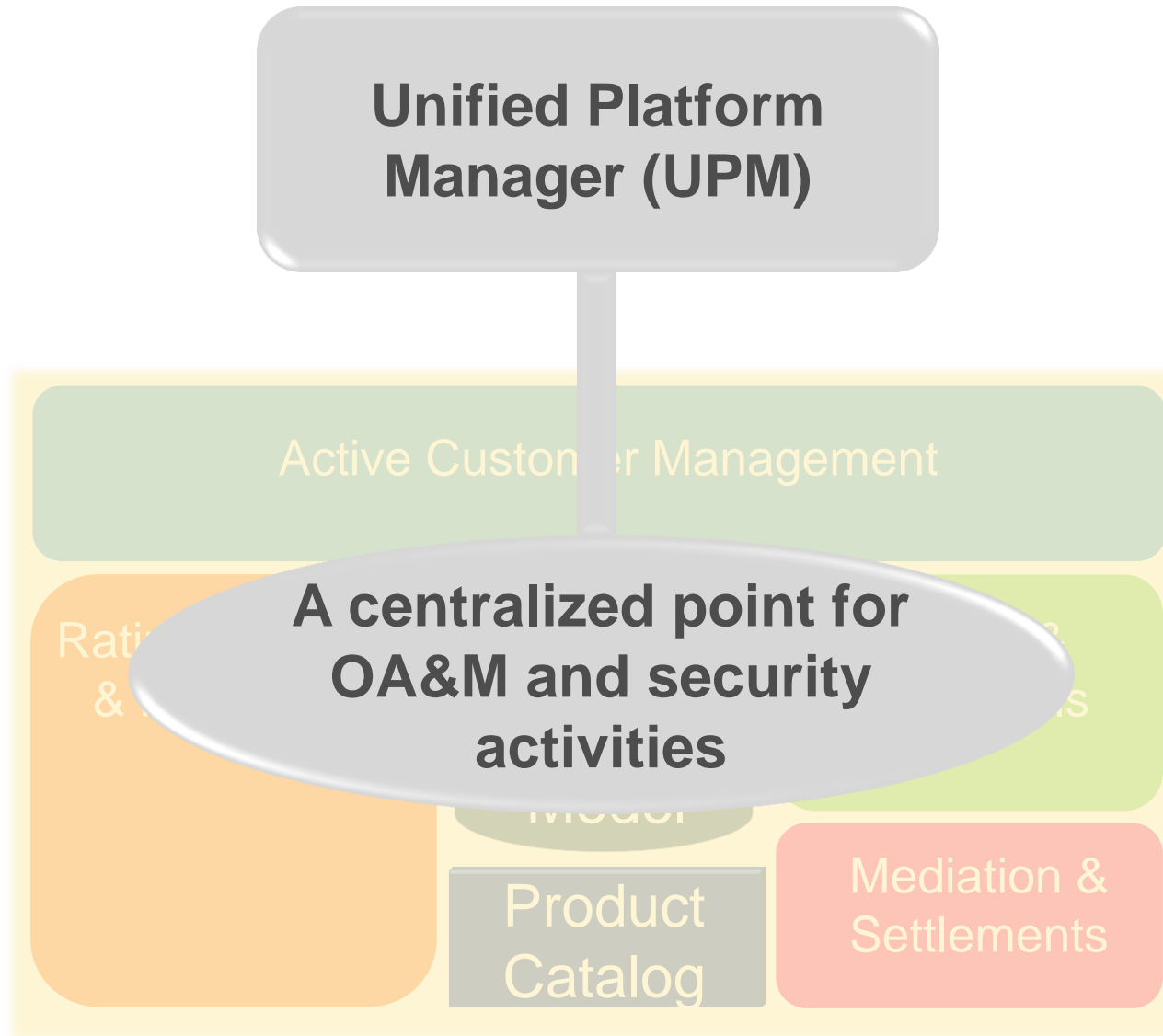
UPM Jobs and Workflows

UPM Inventory Reports

Logs and File Management

Administering the UPM

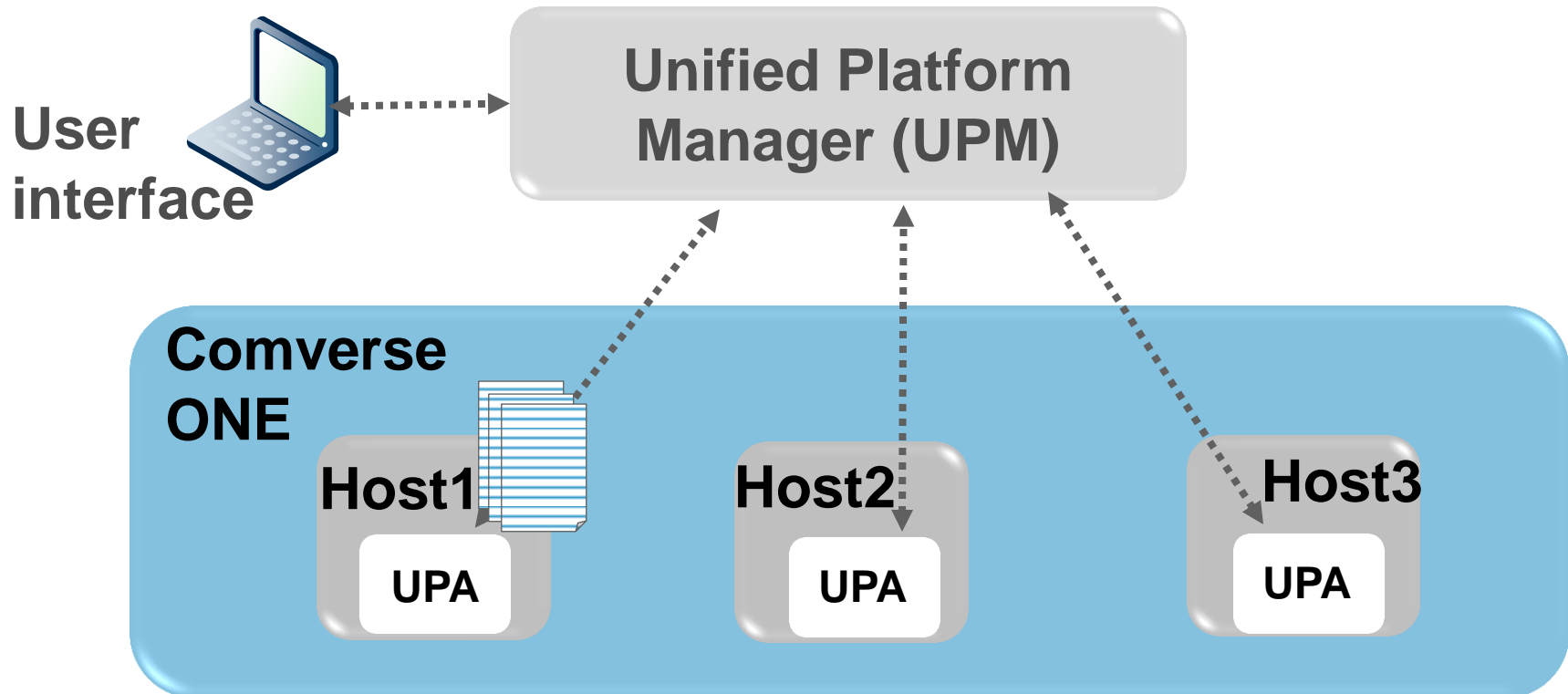
Unified Platform Manager (UPM) – Overview



Unified Platform Architecture

The Unified Platform architecture consists of:

- Centralized Unified Platform Manager (UPM)
- Unified Platform Agent (UPA) on each managed node
- Management Shell command line interface (CLI) or the Management Console graphical user interface (GUI).



UPM Services

OA&M Management

Event and Alarm

Process

Job and Workflow

Inventory

Log and File

OA&M

Security

Security Management

Identity

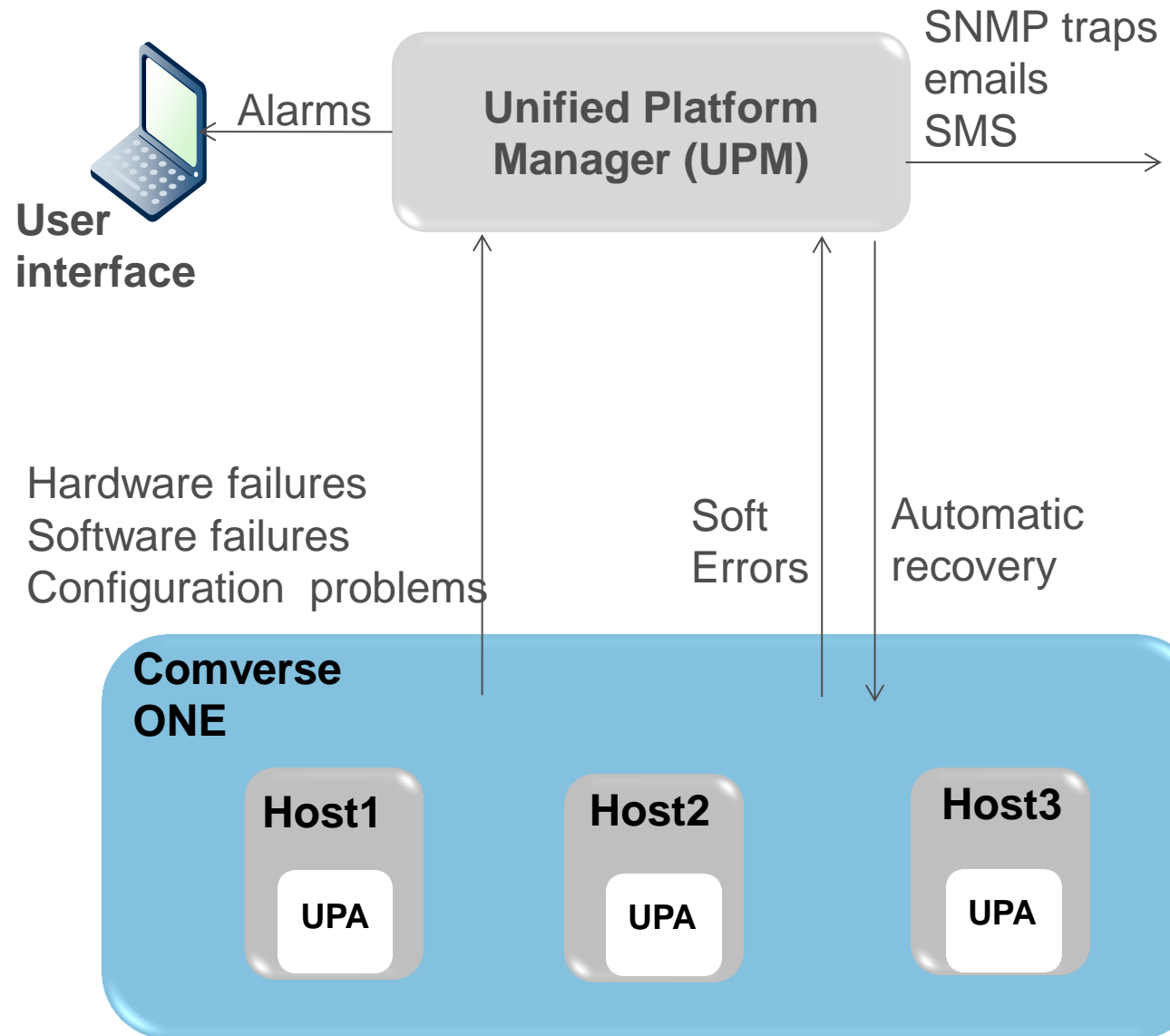
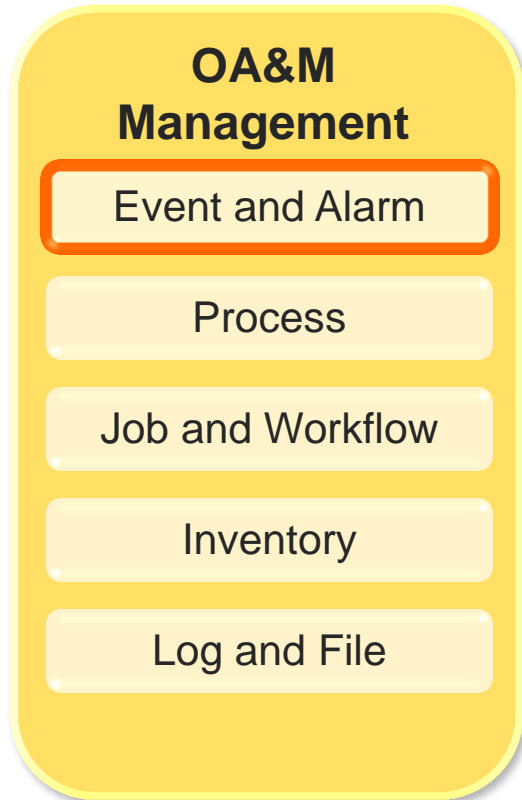
Policy

Accounting and Audit

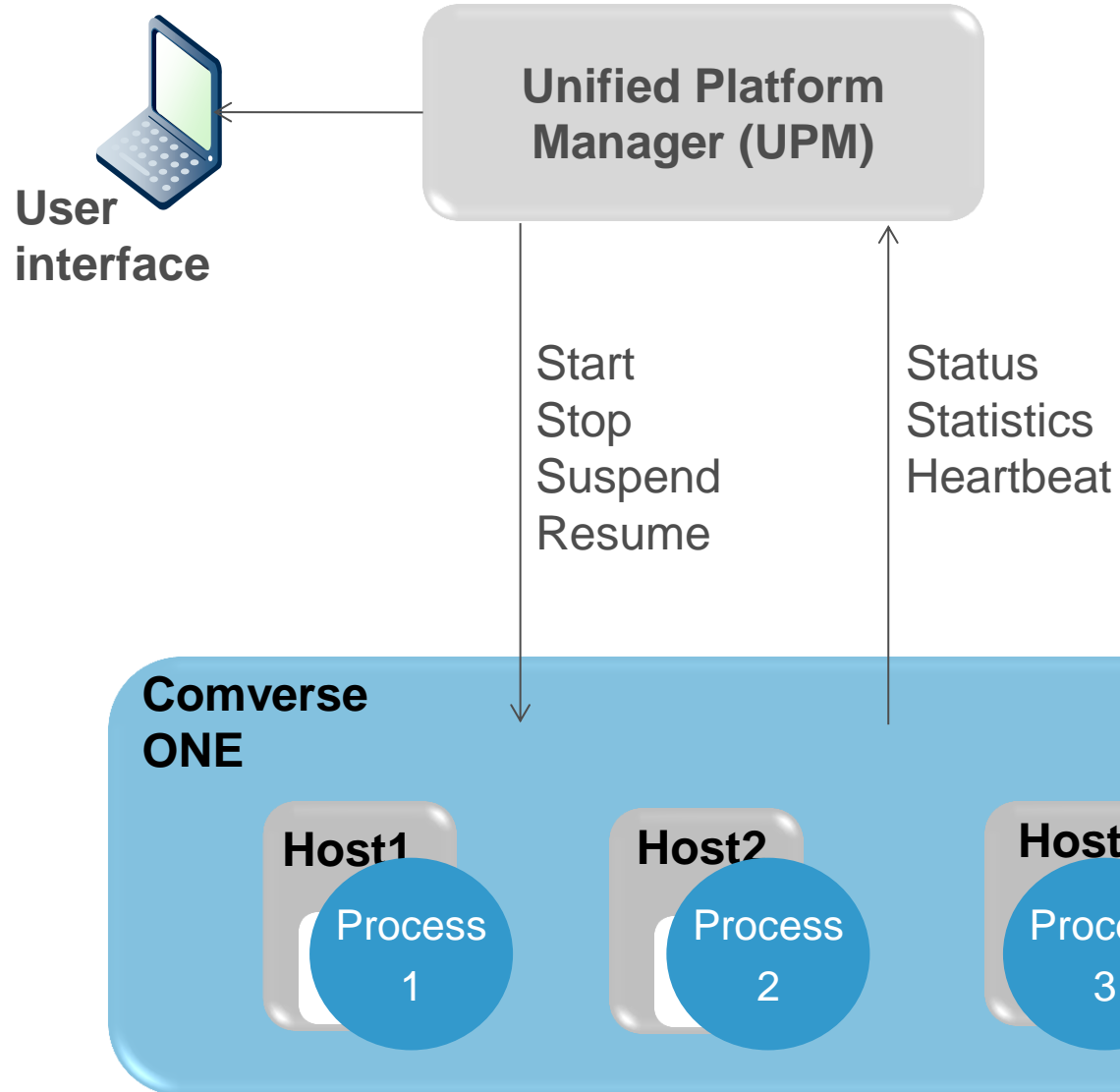
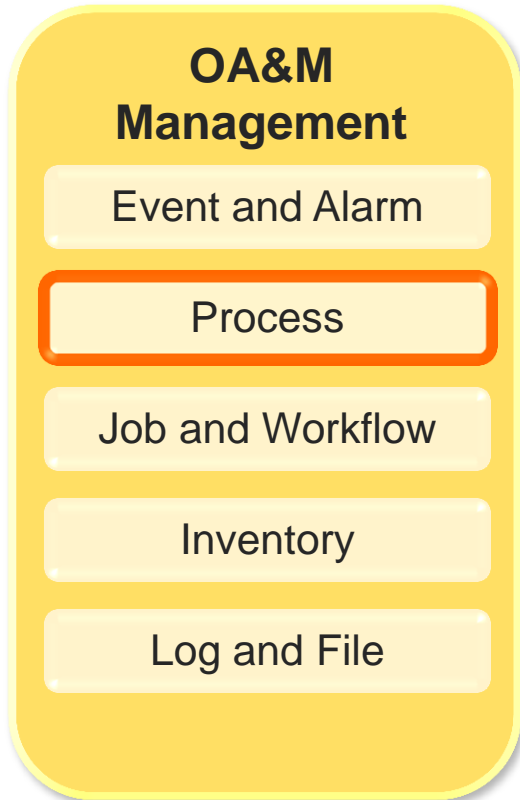
Credential

Key

Event and Alarm



Process Management



Job and Workflow Management

OA&M Management

Event and Alarm

Process

Job and Workflow

Inventory

Log and File

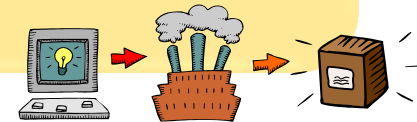
Job

A periodic or on-demand operation that is performed on a node, such as purging of database records



Workflow

- The interaction of workflow entities
- A workflow entity can be any simple or complex job, monitor, process, or other workflow such as payment cycle



UPM

- Manages jobs and their schedules across all related units
- Manages workflows that define execution dependency of related jobs in multiple steps
- Aggregates and provides running jobs and job execution history across all related units

Inventory Management

OA&M Management

Event and Alarm

Process

Job and Workflow

Inventory

Log and File

Inventory examples:

- Disk
- Memory
- Processor
- Software

UPM

Inventory DB

Scheduled scripts collect inventory data

Host2

UPA



Log and File Management

OA&M Management

Event and Alarm

Process

Job and Workflow

Inventory

Log and File

- Turns on/off tracing
- Adjusts log level
- Aggregates and provides application logs across all units
- Manages and rotates applications logs

Review Questions

Which functionality of UPM is used for?

1. Detecting that a server is down?
 - a. Events and alarms management
 - b. Process management
 - c. Inventory management
 - d. Job and workflow management
2. Stopping a process?
 - a. Events and alarms management
 - b. Process management
 - c. Inventory management
 - d. Log management
3. Performing scheduled backup
 - a. Events and alarms management
 - b. Process management
 - c. Inventory management
 - d. Job and workflow management
4. Finding what is the free disk space on a server?
 - a. Log and File management
 - b. Process management
 - c. Inventory management
 - d. Job and workflow
5. Transferring files from a server to the UMP
 - a. Log and File management
 - b. Process management
 - c. Inventory management
 - d. Job and workflow

UPM GUI Access

<http://<UMP Server IP address>:8800/upm/>,

Comverse ONE Unified Platform

Welcome, secadmin | Last Updated: 04/28/2010 8:14:49 AM

HOME EVENT TASK INVENTORY PROCESS PROVISIONING

Site Summary

Site Inventory

Node Class	Maintenance Mode	Nodes Online	Nodes Offline	Nodes Down	Total
dgu	0	1	0	0	1
rht	0	1	0	0	1
billing	0	1	0	0	1
sgu	0	1	0	0	1
offrater	0	1	0	0	1
asu	0	1	0	0	1
slu	0	2	0	1	3
manager	0	1	0	0	1
sdp	0	1	0	0	1
sapi	0	1	0	0	1

Alarm Summary

Most Recent Alarms

Class	NodeName	Event Id	Severity	TimeStamp
SLU	ORP1	ALERT_JOB_UNITSTATUS	CRITICAL	04/28/2010 9:45:00 AM
ASU	ASU1	FTP_SEND_10.108.108.6	MAJOR	04/28/2010 8:30:00 AM
SLU	ORP1	ALERT_WKF_BACKUP_MSF-BACKUP-CONFIG	CRITICAL	04/28/2010 8:00:00 AM
SLU	ORP1	ALERT_JOB_COMPRESS	CRITICAL	04/28/2010 8:00:00 AM
SLU	ORP1	ALERT_JOB_CONFBACKUP	MAJOR	04/28/2010 8:00:00 AM
DGU	DGU1	FTP_SESSION_10.230.12.107	CRITICAL	04/28/2010 7:10:03 AM

Process Summary

Upcoming Processes

SiteId	Class	NodeName	Name	FireTime	Module
CTD	asu	asu1	ivr		--
CTD	billing	billing1	tsprocbilling		--
CTD	billing	billing1	tspcbiling		--
CTD	billing	billing1	tao_irep		--
CTD	billing	billing1	tao_ns		--

Site Alarm Summary

NodeClass	Critical	Major	Minor	Info	Total
ASU	2	2	0	0	4
BILLING	1	0	0	0	3
DGU	1	0	0	0	1
MANAGER	5	0	0	0	5
OFFRATER	2	3	0	0	7
RHT	4	1	0	0	5
SAPI	1	1	0	0	2
SDP	1	1	0	0	3
SGU	2	1	0	0	3

Alarm Summary

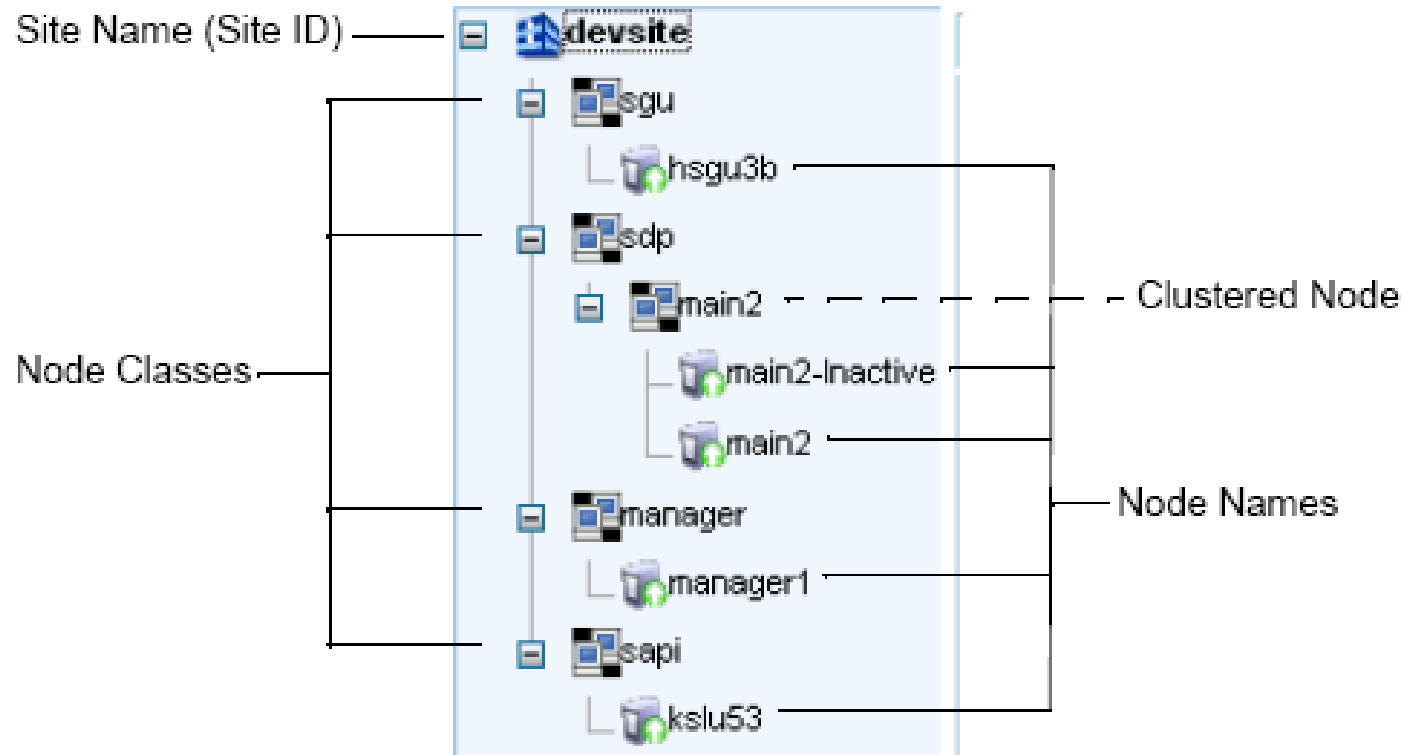
Total System Alarms

CRITICAL-20

WARNING-5

MAJOR-9

Using the Navigation Tree



UPM CLI Access

```
[root@upm1 ~]# mshell
```

```
login: secadmin
```

```
Password:
```

```
*****  
*                                                                 *  
*                                                                 *  
*  Welcome to Unified Platform Version 3.0!                      *  
*                                                                 *  
*                                                                 *  
*                                                                 *  
*                                                                 *  
*****
```

```
upm1:root:mshell> █
```

mShell resides in the UPM and in all the UPAs.

mShell Parameters

Use global variables in either the UPM or UPA to limit the result set.

<code>-i <ignorelist></code>	Provides a list of field names that will not be displayed in the result set
<code>-f <filterlist></code>	<ul style="list-style-type: none">Provides a filter to select records by values in specified fieldsThe format is: fieldName:fieldString
<code>-q <query-type></code>	Predefined in build_favorite, the query type is used within the build_report command to retrieve a saved query

```
kosa4:root:mshell> list_active_events -mon sdp1 -i SiteID,NodeClass,NodeName,NodeInstance
```

EventID	Severity	Instance	TimeStamp	Escalated	Acknowledged
ALERT_FS_USR	MAJOR	USR	03:33:01 04/06/2008	no	no
ALERT_JOB_RECOMP_INV	CRITICAL	HIST	16:30:03 03/28/2008	no	no
ALERT_JOB_RECOMP_INV	CRITICAL	PCAT	16:30:03 03/28/2008	no	no

mShell Manager Variables

Used only in the UPM, manager variables return results for specified nodes.

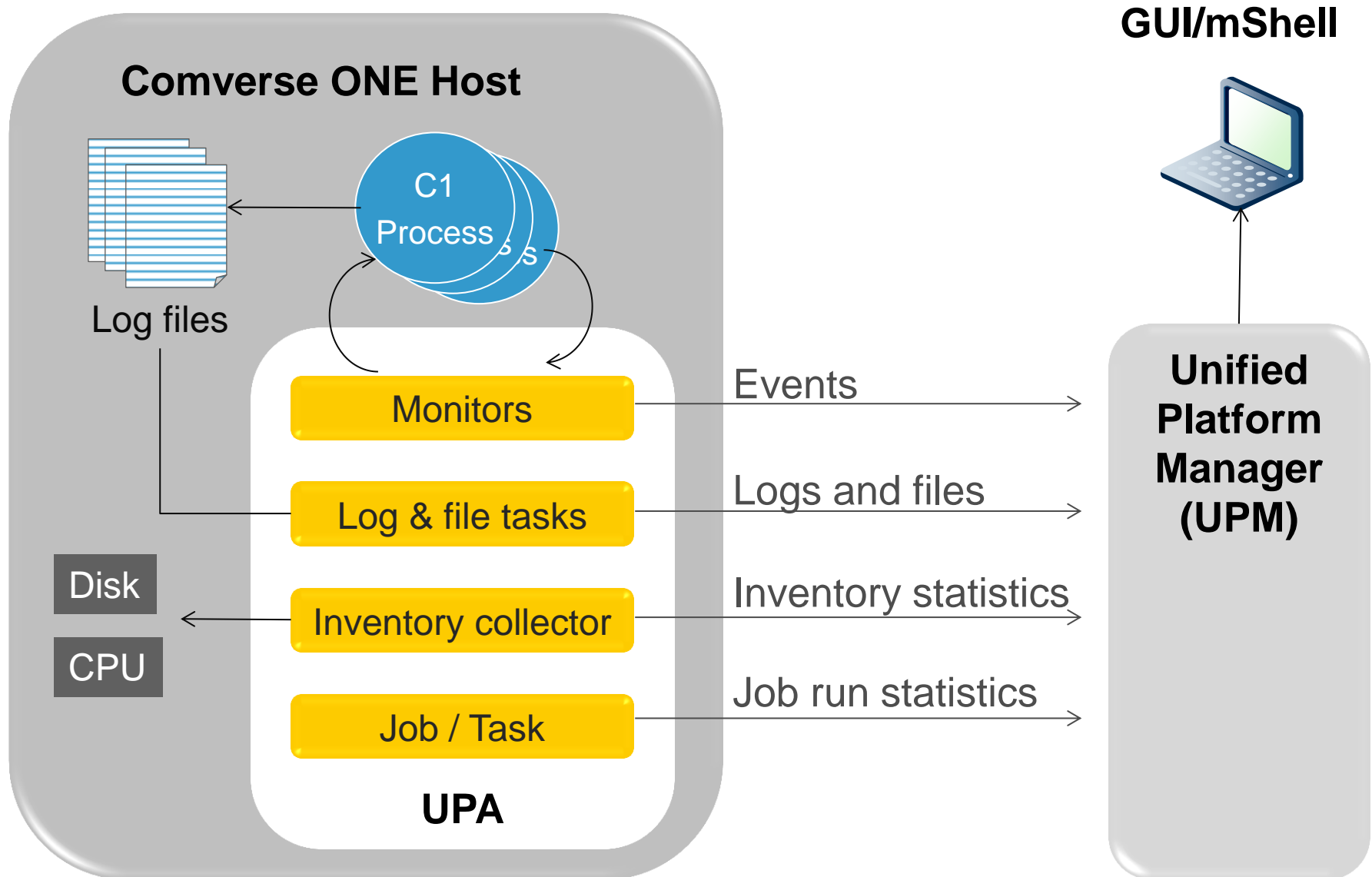
<code>-c <NodeClass></code>	Returns results from all nodes within the specified node class
<code>-mon <NodeName></code>	Returns results for the specified node name
<code>-n <NodeInstance></code>	Returns results for a specified node identified by ip address
<code>-m <mode></code>	Returns results for the specified active or passive node in a cluster

```
upm:root:mshell> export_inventory -inv memory -c sdp
```

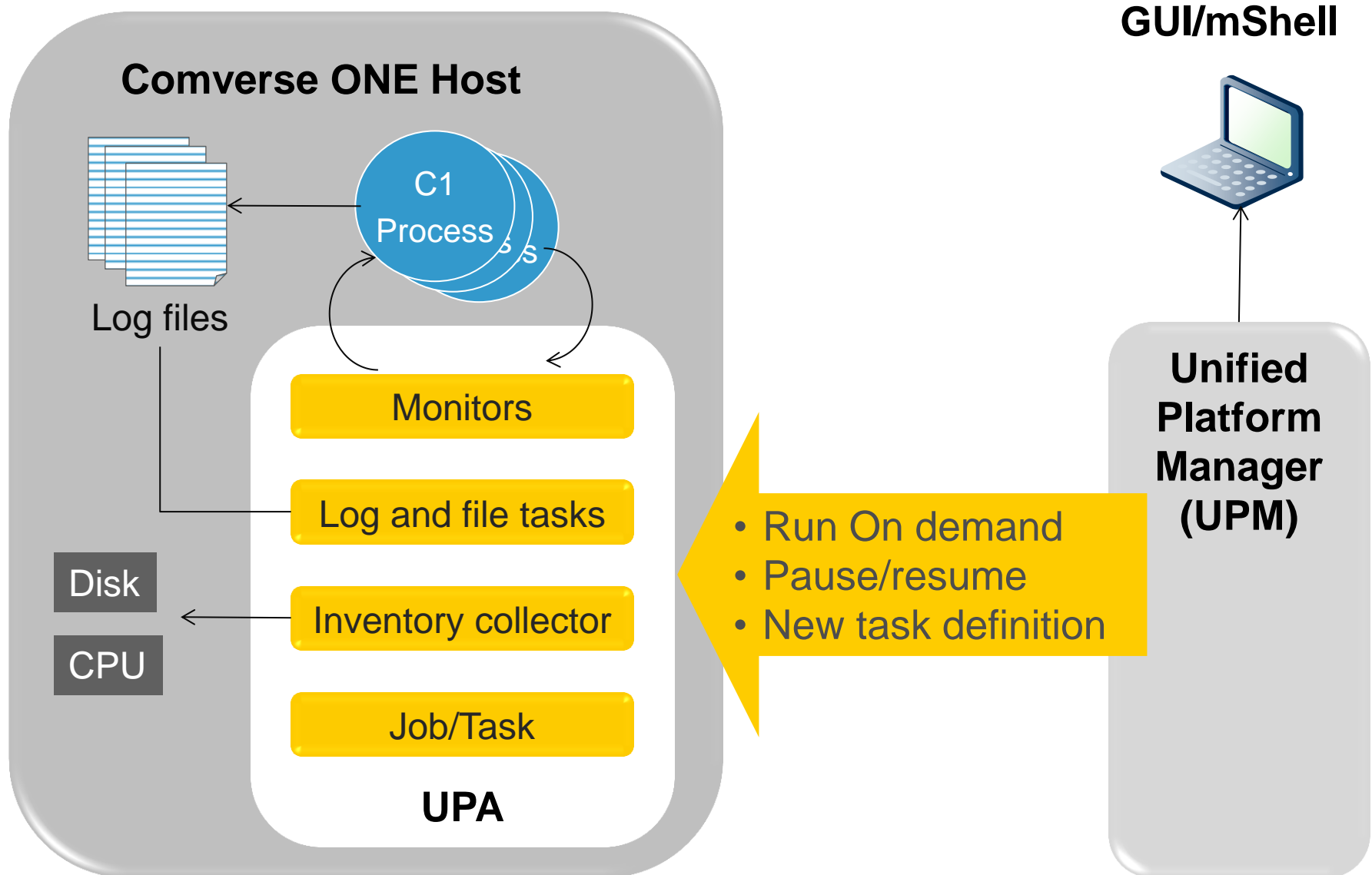
Status message:

Operation Successful

UPM Architectural Summary – UPA to UPM



UPM Architectural Summary – UPM to UPA



Additional UPM Functionalities

OA&M Management

Security Management

Additional Functionalities

Configuration

Installation

SMS Gateway

Backup and Restore

Time Server (NTP)

- Monitor specified files
- Raise an alarm if changes are detected

Review Questions

1. You would like to manage a specific node, for example an SLU1. How do you limit the information displayed in the GUI to this node?
 - a. Access the GUI using the node IP
 - b. Enter the node name in the search box
 - c. Select the node in the navigation tree
 - d. There is no way to limit the information displayed in the GUI to a single node.
2. Which parameter enables you perform CLI operations on a single Comverse ONE node (for example an SLU1)?
 - a. -i
 - b. -c
 - c. -mon
 - d. -f
3. Which of the following components that run on a Comverse ONE host is NOT part of the UPA?
 - a. Event monitor
 - b. Process
 - c. Inventory collector
 - d. Job/task

Agenda

UPM Overview and Concepts

UPM Alarms and Events

UPM Process Management

UPM Jobs and Workflows

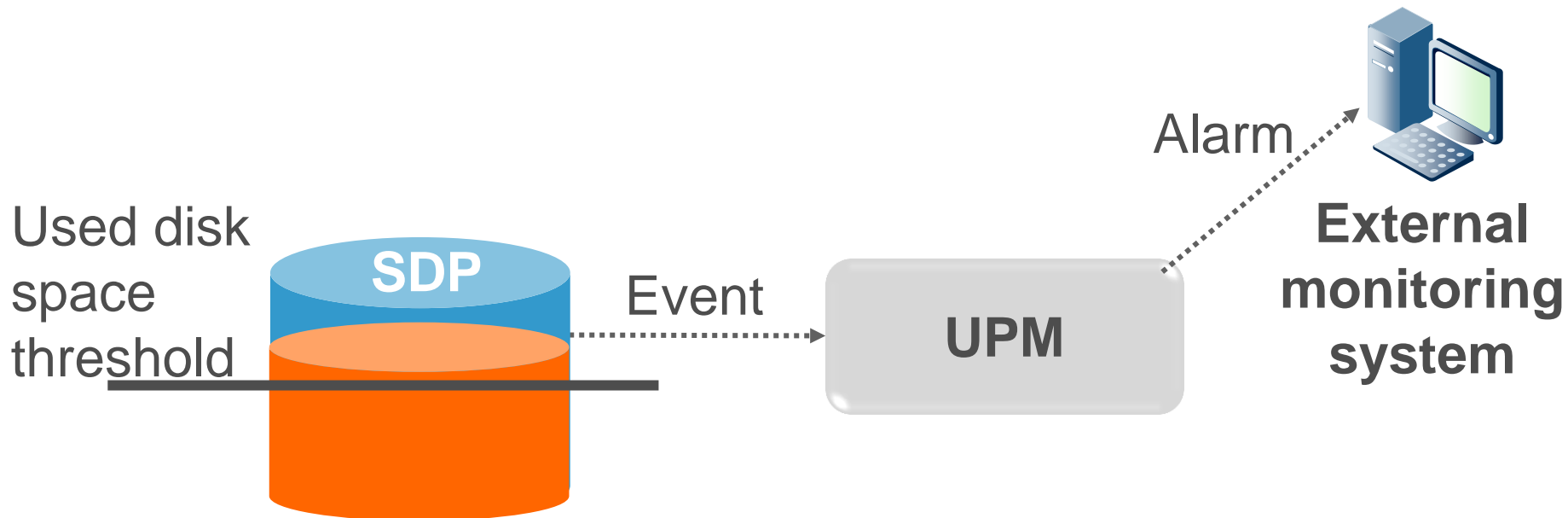
UPM Inventory Reports

Logs and File Management

Administering the UPM

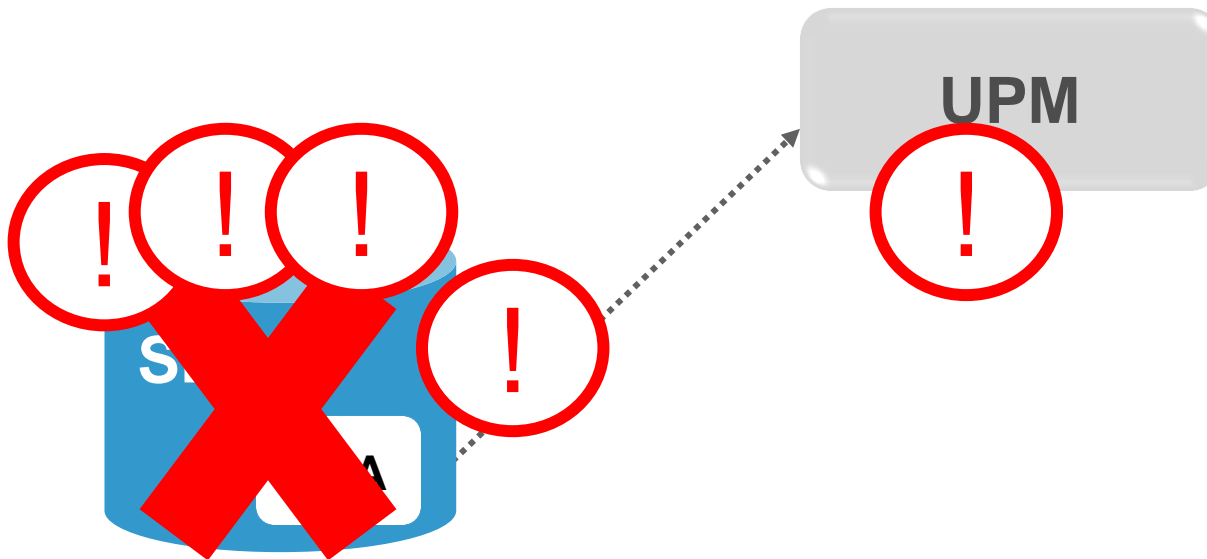
What Are Events and Alarms?

- An **event** is generated when an event condition is violated.
- An **event condition** is a threshold associated with a monitored resource.
- **Alarms** are events that get forwarded to external servers.

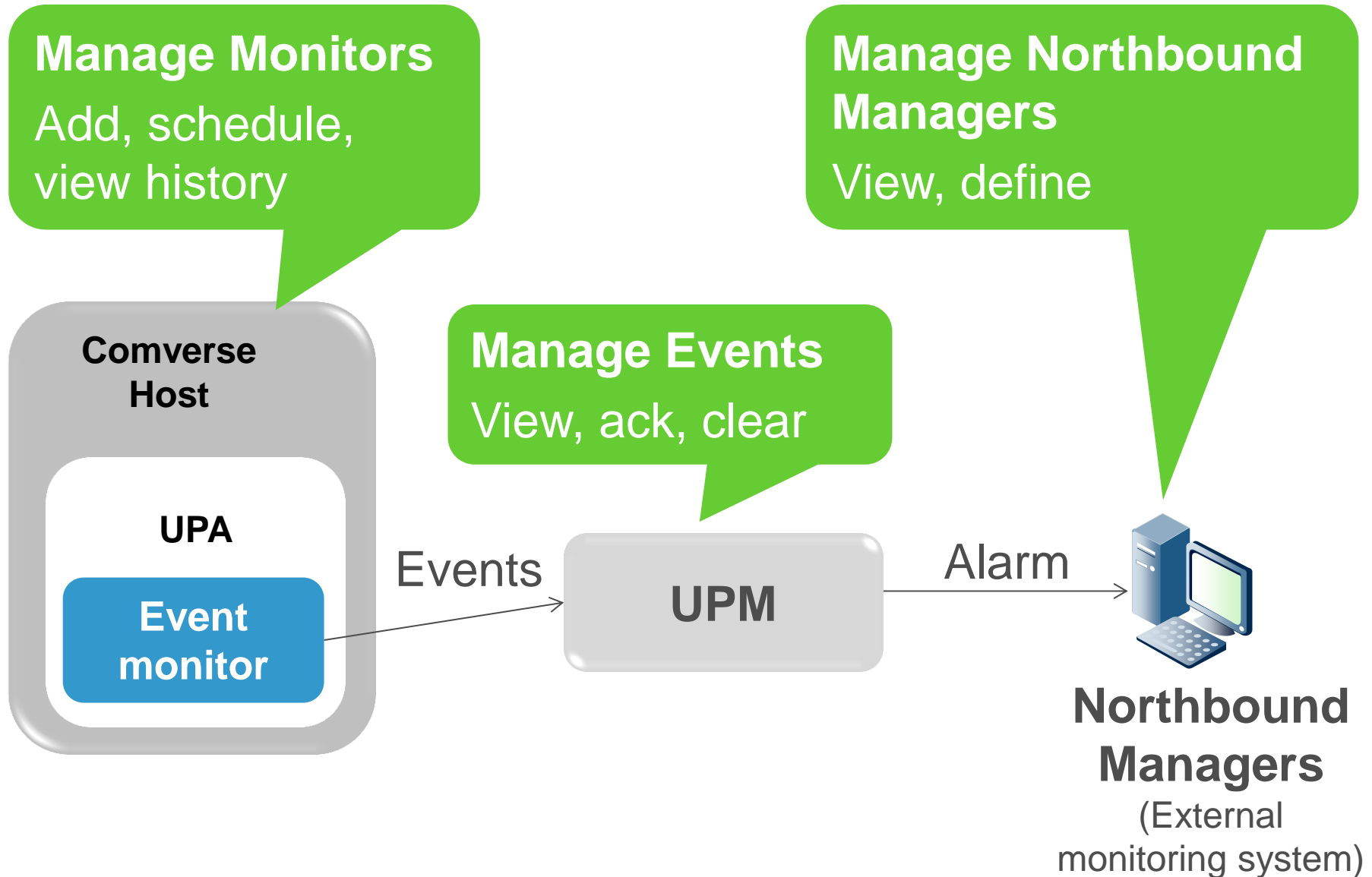


Event and Alarm Management

- Provides a remote interface to view alarms
- Monitors units for the detection of HW and SW failures
- Correlates related alarms
- Groups and filters alarms
- Aggregates alarms

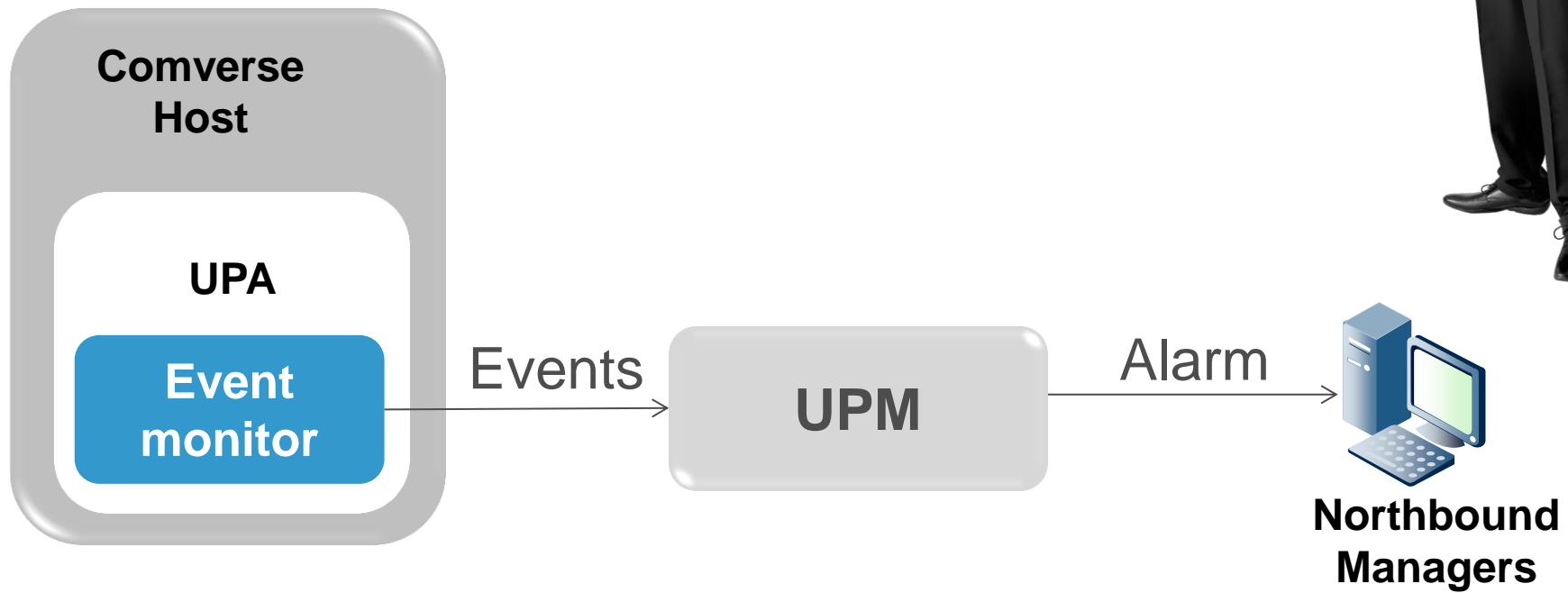


Event-Processing Components and Management



Which Events Are Monitored?

- How can event definitions be modified?
 - By modifying the monitors
- I'm not interested to view an event type, what can be done?
 - Disable monitor
 - Suppress events – incoming or outgoing from UPM



Event States and Actions

Active

Clear

- Move to history
- When failure is resolved
- Or by user

Acknowledge

- Prevent escalation
- By user

Escalate

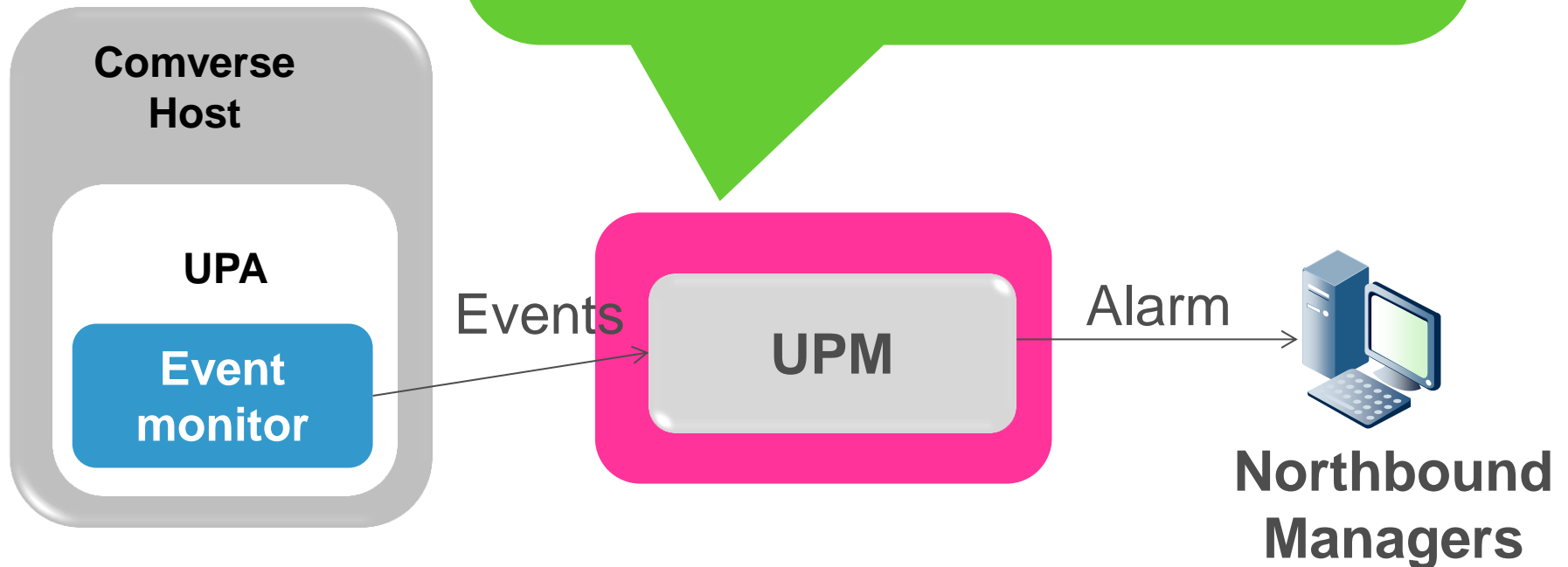
- Based on escalation rules
- Resend , resend with higher priority, or resend to a northbound managers.

History

Event Management

Manage Events

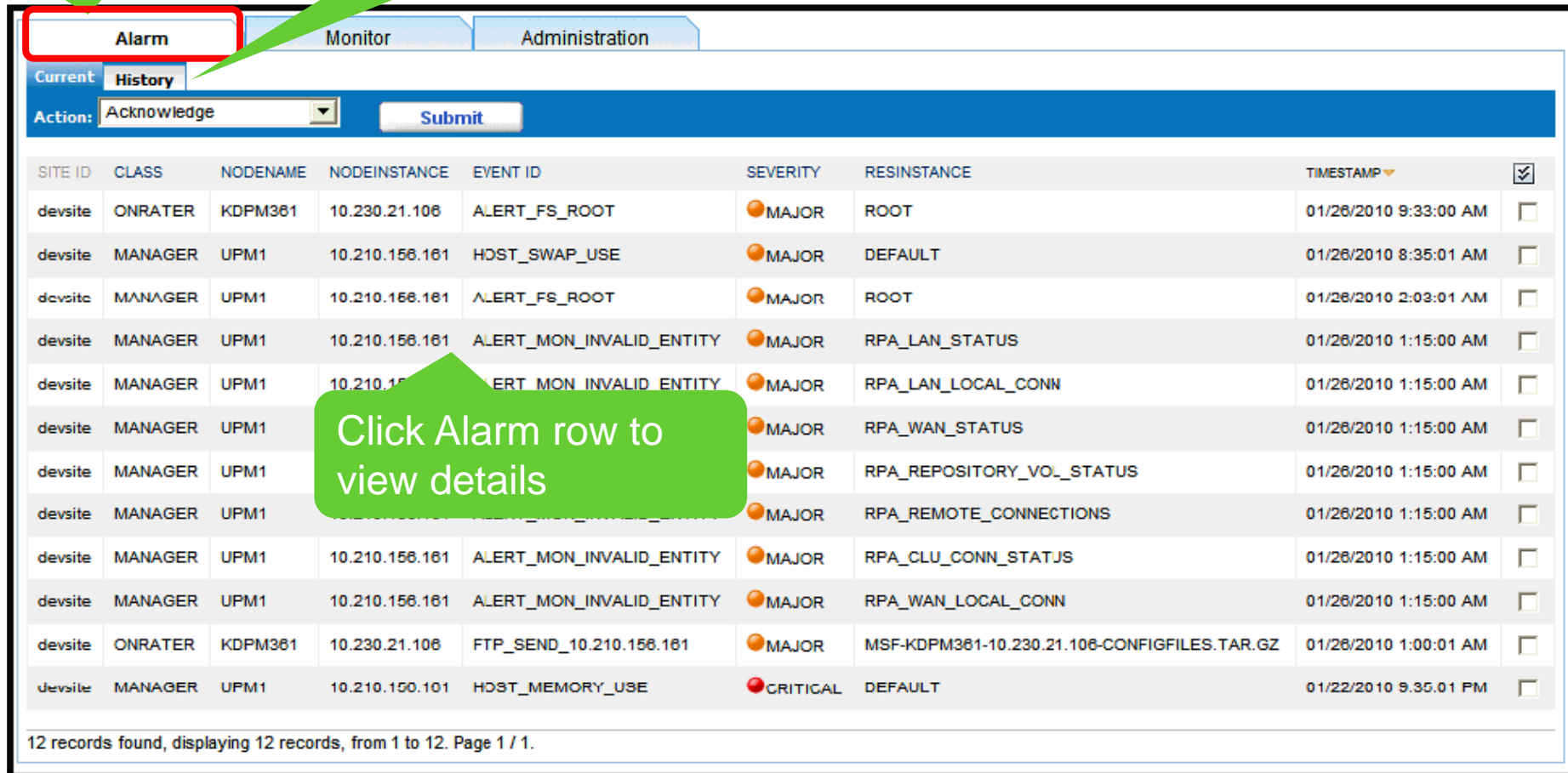
- View current and historic events
- View event properties
- Perform actions on events: acknowledge or clear
- Managing Escalation rules



UPM GUI – Viewing Alarms

Select
Alarms tab

View current or
historic Alarms



Alarm Monitor Administration

Current History

Action: Acknowledge Submit

SITE ID	CLASS	NODENAME	NODEINSTANCE	EVENT ID	SEVERITY	RESINSTANCE	TIMESTAMP	
devsite	ONRATER	KDPM361	10.230.21.106	ALERT_FS_ROOT	MAJOR	ROOT	01/26/2010 9:33:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	HOST_SWAP_USE	MAJOR	DEFAULT	01/26/2010 8:35:01 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_FS_ROOT	MAJOR	ROOT	01/26/2010 2:03:01 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_LAN_STATUS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_LAN_LOCAL_CONN	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_WAN_STATUS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_REPOSITORY_VOL_STATUS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_REMOTE_CONNECTIONS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_CLU_CONN_STATUS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_WAN_LOCAL_CONN	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	ONRATER	KDPM361	10.230.21.106	FTP_SEND_10.210.156.161	MAJOR	MSF-KDPM361-10.230.21.106-CONFIGFILES.TAR.GZ	01/26/2010 1:00:01 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.150.101	HOST_MEMORY_USE	CRITICAL	DEFAULT	01/22/2010 9:35:01 PM	<input type="checkbox"/>

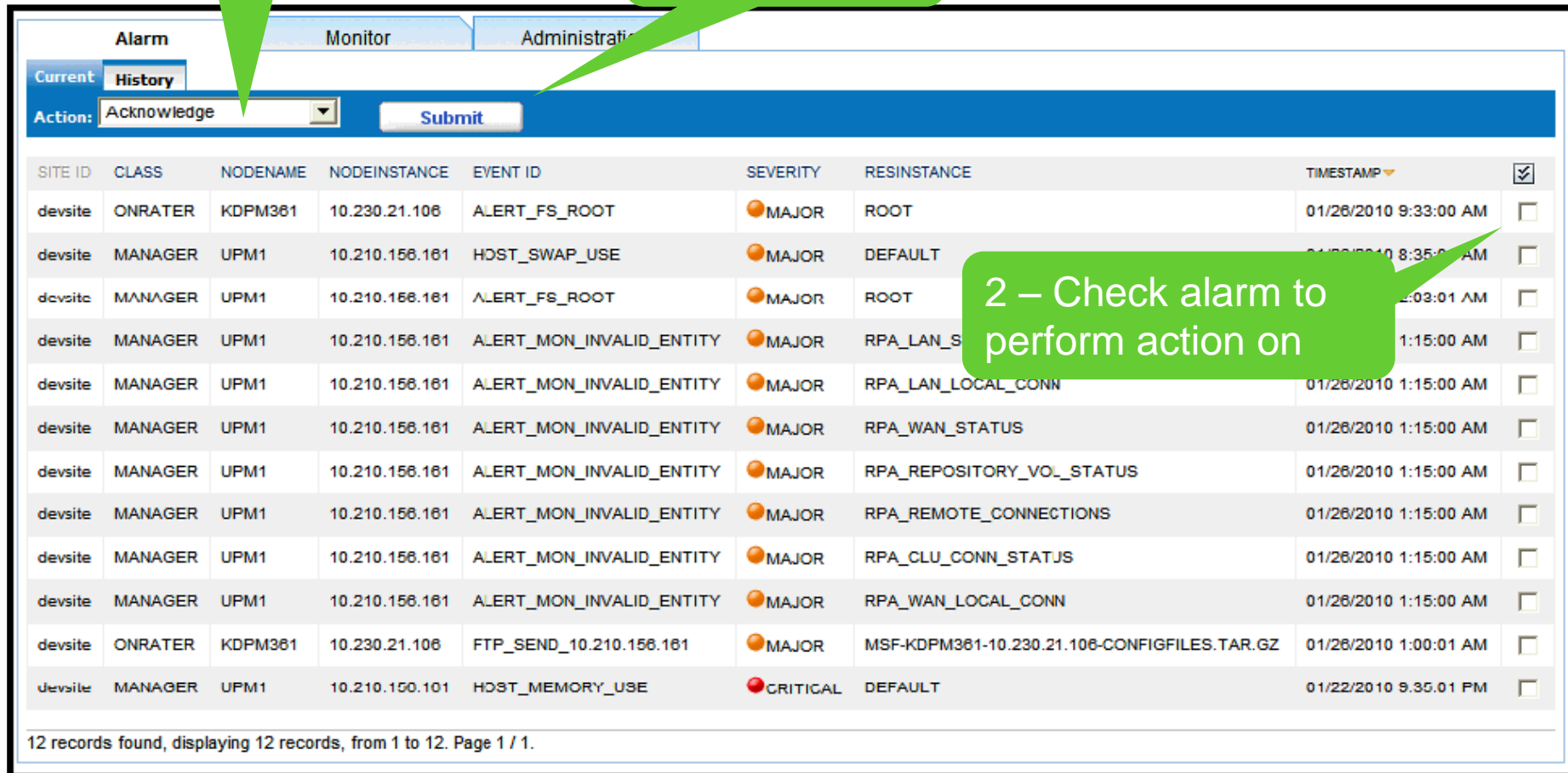
12 records found, displaying 12 records, from 1 to 12. Page 1 / 1.

UPM GUI – Performing Actions on Alarms

1 – Select the action

3 – Click Submit

2 – Check alarm to perform action on



The screenshot displays the UPM GUI's Alarm tab. At the top, there are tabs for 'Alarm', 'Monitor', and 'Administration'. Below these, there are sub-tabs for 'Current' and 'History'. The 'Action:' dropdown menu is set to 'Acknowledge', and a 'Submit' button is visible. The main area contains a table of alarms with columns: SITE ID, CLASS, NODENAME, NODEINSTANCE, EVENT ID, SEVERITY, RESINSTANCE, TIMESTAMP, and a checkbox for selection. The table lists 12 records, all of which are MAJOR or CRITICAL severity alarms. The bottom of the page shows a status bar indicating '12 records found, displaying 12 records, from 1 to 12. Page 1 / 1.'

SITE ID	CLASS	NODENAME	NODEINSTANCE	EVENT ID	SEVERITY	RESINSTANCE	TIMESTAMP	<input type="checkbox"/>
devsite	ONRATER	KDPM361	10.230.21.106	ALERT_FS_ROOT	MAJOR	ROOT	01/26/2010 9:33:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	HOST_SWAP_USE	MAJOR	DEFAULT	01/26/2010 8:35:01 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_FS_ROOT	MAJOR	ROOT	01/26/2010 1:03:01 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_LAN_S	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_LAN_LOCAL_CONN	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_WAN_STATUS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_REPOSITORY_VOL_STATUS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_REMOTE_CONNECTIONS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_CLU_CONN_STATUS	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.156.161	ALERT_MON_INVALID_ENTITY	MAJOR	RPA_WAN_LOCAL_CONN	01/26/2010 1:15:00 AM	<input type="checkbox"/>
devsite	ONRATER	KDPM361	10.230.21.106	FTP_SEND_10.210.156.161	MAJOR	MSF-KDPM361-10.230.21.106-CONFIGFILES.TAR.GZ	01/26/2010 1:00:01 AM	<input type="checkbox"/>
devsite	MANAGER	UPM1	10.210.150.101	HOST_MEMORY_USE	CRITICAL	DEFAULT	01/22/2010 9:35:01 PM	<input type="checkbox"/>

12 records found, displaying 12 records, from 1 to 12. Page 1 / 1.

mShell – Viewing Active Events

All active events for the entire site, or active events for a given node or nodes, can be viewed.

Show only events collected by this monitor

Do not show these event attributes in output

```
kosa4:root:mshell> list_active_events -mon sdp1 -i SiteID,NodeClass,NodeName,NodeInstance
```

EventID	Severity	Instance	Timestamp	Escalated	Acknowledged
ALERT_FS_USR	MAJOR	USR	03:33:01 04/06/2008	no	no
ALERT_JOB_RECOMP_INV	CRITICAL	HIST	16:30:03 03/28/2008	no	no
ALERT_JOB_RECOMP_INV	CRITICAL	PCAT	16:30:03 03/28/2008	no	no
ALERT_JOB_RECOMP_INV	CRITICAL	MAIN	16:30:03 03/28/2008	no	no
SDP_DB_HIST	CRITICAL	DB_HIST	18:02:26 03/24/2008	no	no
SDP_DB_MAIN	CRITICAL	DB_MAIN	18:02:22 03/24/2008	no	no
SDP_DB_LSNR	CRITICAL	DB_LSNR	17:52:18 03/24/2008	no	no
ALERT_MON_ENQUEUE	MINOR	HIST	17:50:07 03/24/2008	no	no
ALERT_MON_ENQUEUE	MINOR	PCAT	17:50:07 03/24/2008	no	no
ALERT_MON_ENQUEUE	MINOR	MAIN	17:50:07 03/24/2008	no	no

Event Suppression

Depending on an organization's particular setup, certain alarms might not be required.

Event ID

Optional inbound or
outbound

Event monitor

```
kosa4:root:mshell> suppress_event -id HOST_MEMORY_USAGE -inbound -mon sdp1
```

SiteID	NodeClass	NodeName	NodeInstance	Expression	Action	TimeStamp
ditenv	SDP	SDP1	10.230.18.105	HOST_MEMORY_USAGE	inbound	16:33:53 04/25/2008

```
kosa4:root:mshell>
```

```
kosa4:root:mshell> list_suppressed_events -mon sdp1
```

SiteID	NodeClass	NodeName	NodeInstance	Expression	Action	TimeStamp
ditenv	SDP	SDP1	10.230.18.105	HOST_MEMORY_USAGE	inbound	09:27:57 04/28/2008
ditenv	SDP	SDP1	10.230.18.105	ALERT_JOB.*	outbound	09:28:46 04/28/2008

```
kosa4:root:mshell>
```


Adding Escalation Rules

```
upm1:root:mshell> add_escalation_rule -id HOST_ESCALATION_RULE -x HOST.* -d "Esc Rule for HOST Events"
-i SiteID,NodeClass,NodeName,NodeInstance

RuleId      State      Timer      Type      Severity      Retry      Expression      Message
--          --          --          --          --          --          --          --
1440        enable     1440        resend    CRITICAL      3          HOST.*          --

upm1:root:mshell>
```

Additional escalation actions:

List_escalation_rule	View details for all escalation rules or for an individual rule.
Disable_escalation_rule	events associated with the rule will not be escalated
Remove_escalation_rule	Remove rule form escalation map. Events associated with the rule will not be escalated

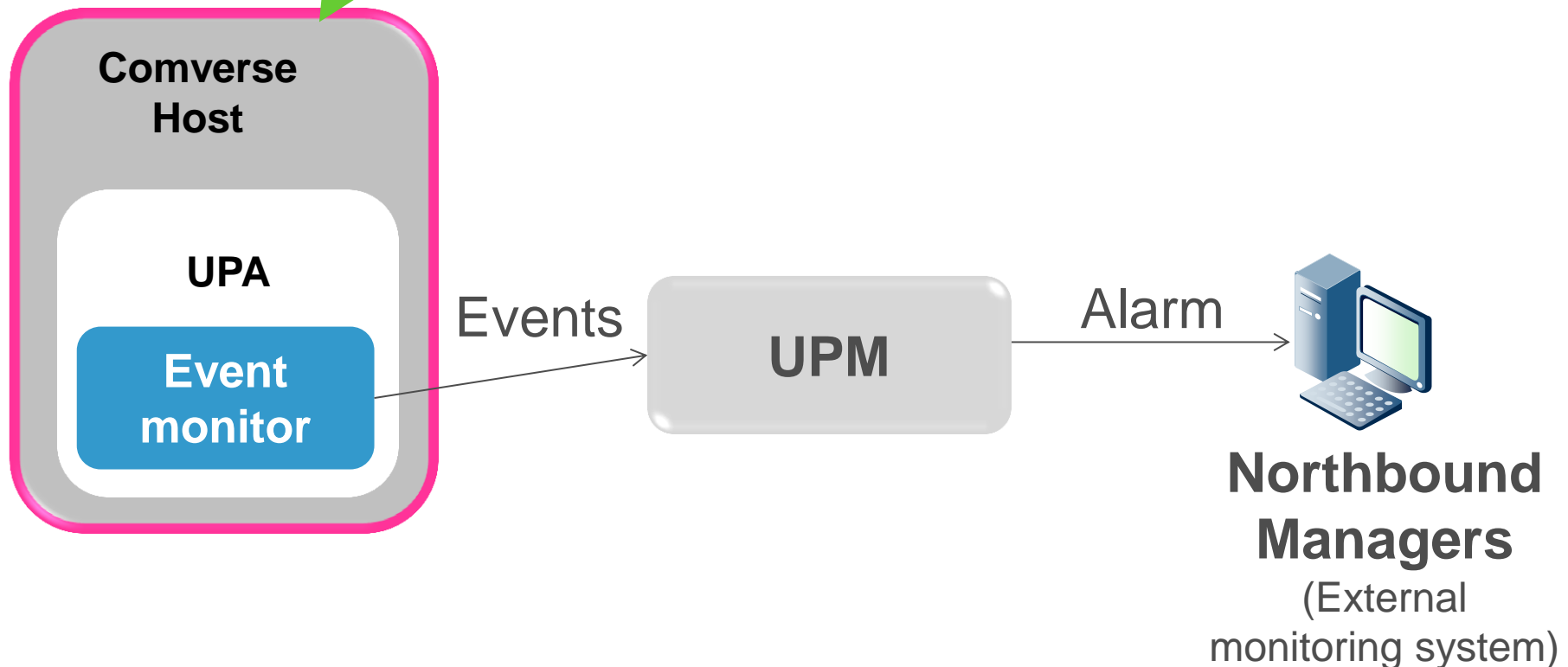
Review Questions

1. When does an event get escalated?
 - a. When a user clears it.
 - b. When a user acknowledges it
 - c. When a user escalates it
 - d. Automatically based on defined escalation rules
2. How are escalation rules defined?
 - a. Using the GUI
 - b. Using the CLI
 - c. Within the monitor definition
3. You would like to view a specific event id in the UPM GUI, but would not like the event to be sent to northbound managers. How can you do it?
 - a. Disable the monitor
 - b. Disable the northbound manager
 - c. Use the CLI command `suppress_event` with the `–outbound` parameter
 - d. Use the CLI command `suppress_event` with the `–inbound` parameter

Event-Processing Components and Management

Manage Monitors

Add, schedule,
view history



UPM GUI – Event Tab (Monitors)

The screenshot displays the Comverse ONE Unified Platform interface. The top navigation bar includes tabs for HOME, EVENT, TASK, INVENTORY, PROCESS, and PROVISIONING. The EVENT tab is active, and the sub-tab 'Monitor' is selected. Below the navigation bar, there are tabs for 'Alarm', 'Monitor', and 'Administration'. The 'Monitor' tab is active, and the 'Current' sub-tab is selected. A dropdown menu is open for the 'Action' field, showing options: Execute, Enable, Disable, Pause, Resume, and Reload. The 'Submit' button is visible next to the dropdown. Below the dropdown is a table of monitors with columns: CTD, SLU, nodeName, NodeInstance, Name, State, Valid, FireTime, and a checkbox. The table contains 10 rows of monitor data. Three green callout boxes provide instructions: 'Actions on monitors' points to the dropdown menu, 'Click a row to view details' points to a row in the table, and 'Check to perform an action on monitor' points to the checkbox in the last row.

COMVERSE Comverse ONE Unified Platform

HOME EVENT TASK INVENTORY PROCESS PROVISIONING

Alarm Monitor Administration

Current History Upload

Action: Execute Submit

Execute
Enable
Disable
Pause
Resume
Reload

CTD	SLU	nodeName	NodeInstance	Name	State	Valid	FireTime	
CTD		2	10.106.106.20	network_compare_data	DISABLED	VALID	02/25/2010 2:26:21 AM	<input type="checkbox"/>
CTD		2	10.106.106.20	network_compare_data	DISABLED	VALID	02/25/2010 6:00:00 AM	<input type="checkbox"/>
CTD		slu2	10.106.106.20	network_compare_data	DISABLED	VALID	02/25/2010 6:00:00 AM	<input type="checkbox"/>
		slu2	10.106.106.20		DISABLED			<input type="checkbox"/>
		slu2	10.106.106.20		DISABLED			<input type="checkbox"/>
CTD	SLU	slu2	10.106.106.20	cpu_load_average	ENABLED			<input type="checkbox"/>
CTD	SLU	slu2	10.106.106.20	memory_usage	ENABLED	VALID	03/24/2010 5:55:00 AM	<input type="checkbox"/>
CTD	SLU	slu2	10.106.106.20	ntp_daemon	ENABLED	VALID	03/24/2010 5:55:00 AM	<input type="checkbox"/>
CTD	SLU	slu2	10.106.106.20	swap_usage	ENABLED	VALID	03/24/2010 5:55:00 AM	<input type="checkbox"/>
CTD	SLU	slu2	10.106.106.20	fs_capacity_data	ENABLED	VALID	03/24/2010 6:03:00 AM	<input type="checkbox"/>

Actions on monitors

Click a row to view details

Check to perform an action on monitor

Uploading Monitors

Alarm Monitor Administration

Current History Upload

Upload

NAME ▲	DATE/TIME
<input type="checkbox"/> application	01/25/2010 11:45:00 AM
<input type="checkbox"/> database	01/25/2010 11:45:00 AM
<input type="checkbox"/> host	01/25/2010 11:45:00 AM
<input type="checkbox"/> log	01/25/2010 11:45:00 AM

Alarm Monitor Administration

Current History Upload

Upload

NAME ▲	DATE/TIME	
<input type="checkbox"/> sapi/log		
<input type="checkbox"/> test_example.cfg	01/27/2010 10:34:00 AM	<input checked="" type="checkbox"/>

Submit

View Running Monitors – mShell

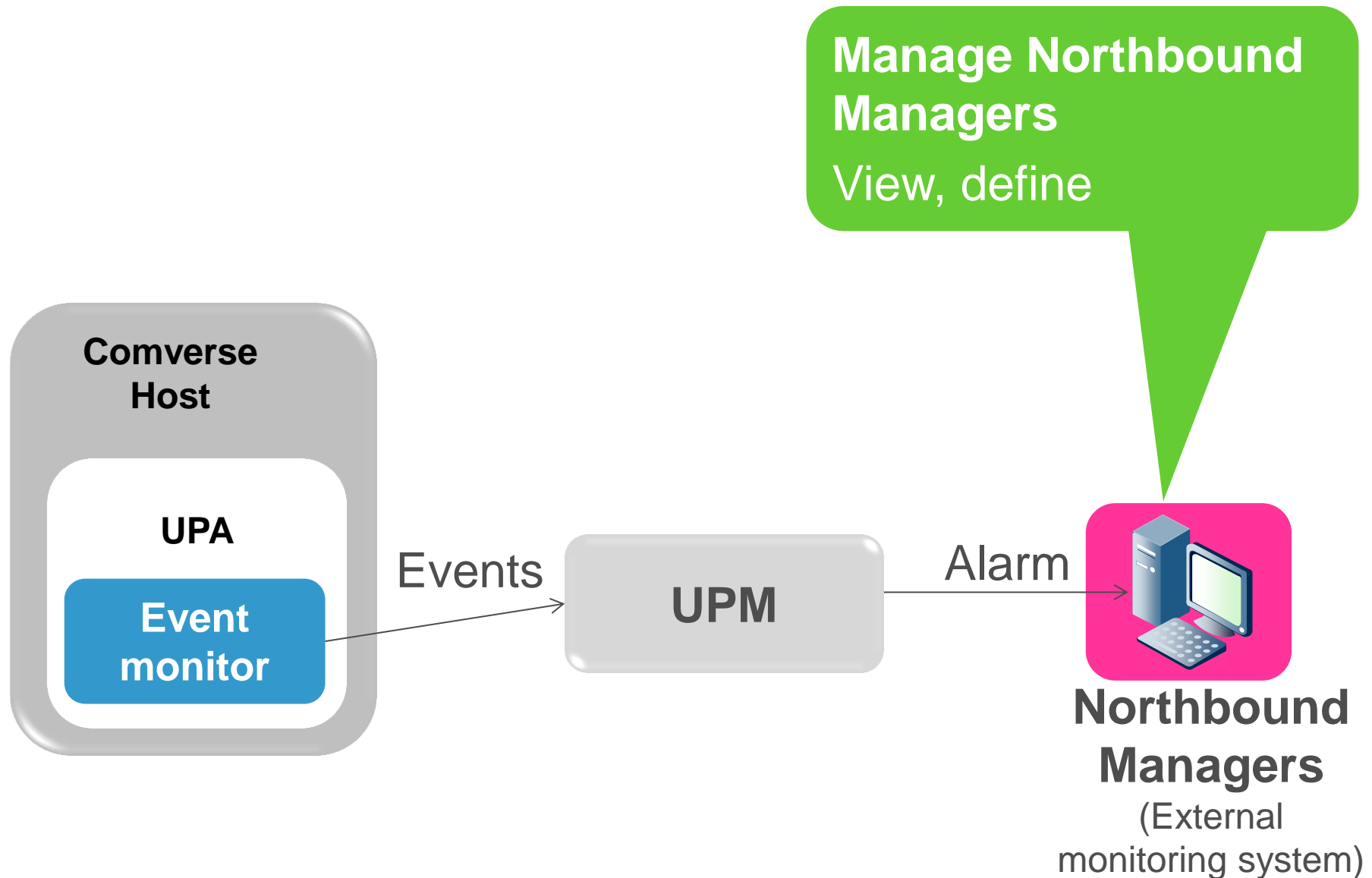
You can view schedules for all monitors.

```
kosa4:root:mshell> list_running_monitors -mon sdp1 -i NodeClass,NodeName,NodeInstance,TimeZone
Running Job Listing
```

Group	Name	Instance	Pid	State	Status	Value	FireTime
database	enqueues	main	2179108	COMPLETE	MINOR	1	15:45:00.019
database	enqueues	pcat	2072790	COMPLETE	MINOR	1	15:45:00.019
database	enqueues	rcat	2072792	COMPLETE	CLEARED	0	15:45:00.019
database	enqueues	hist	2072794	COMPLETE	MINOR	1	15:45:00.019
database	ora_error_check	main	454720	COMPLETE	OK	0	15:20:00.011
database	ora_error_check	pcat	2281640	COMPLETE	OK	0	15:20:00.011
database	ora_error_check	rcat	2142424	COMPLETE	CLEARED	0	15:20:00.011
database	ora_error_check	hist	1937420	COMPLETE	OK	0	15:20:00.011
host	fs_capacity_oradump		835678	COMPLETE	OK	3	15:33:00.454
host	fs_capacity_histvol		2171058	COMPLETE	OK	1	15:33:00.220
host	network_admin		2375756	COMPLETE	OK	0	15:45:00.273
host	cpu_number_monitor		2072776	COMPLETE	MAJOR	1	15:45:00.045
host	cpu_load_average		1937542	COMPLETE	OK	0	15:45:00.021
host	fs_capacity_bckpvol		2330812	COMPLETE	OK	16	15:33:00.019
host	swap_usage		454788	COMPLETE	OK	1	15:45:00.274
host	fs_capacity_root		454762	COMPLETE	OK	2	15:33:00.859
host	cluster_monitor		2179254	COMPLETE	OK	0	15:49:00.015
host	fs_capacity_var		835682	COMPLETE	OK	5	15:33:01.095
host	fs_capacity_oracle		1937458	COMPLETE	CRITICAL	86	15:33:00.422
host	fs_capacity_archive		2130156	COMPLETE	OK	23	15:33:00.018
host	fs_capacity_staging		454760	COMPLETE	OK	1	15:33:00.860
host	fs_capacity_oracle8		2130160	COMPLETE	OK	1	15:33:00.449
host	fs_capacity_tmp		454764	COMPLETE	OK	57	15:33:00.860
host	memory_usage		2142322	COMPLETE	OK	0	15:45:00.273
host	fs_capacity_usr		835680	COMPLETE	MAJOR	78	15:33:01.065
host	fs_capacity_opt		835674	COMPLETE	OK	33	15:33:00.221

```
kosa4:root:mshell>
```

Managing Northbound Managers



UPM GUI – Event Tab (Administration)

Northbound managers administration is under the Administration tab

Organized by communication method

The screenshot shows the UPM GUI Administration tab. At the top, there are tabs for Alarm, Monitor, and Administration. Under Administration, there are sub-tabs for AP Manager, SNMP Manager, SMTP Manager, and SMS Manager. The SNMP Manager sub-tab is selected. Below the sub-tabs, there is a section titled "Current SNMP Managers" which contains an "SNMP Manager Registration" form and a table of existing managers.

SNMP Manager Registration Form:

IP	10.10.10.20	Alias	custsnmp2	Version	2
port	162	Community	public		
<input type="button" value="Submit"/>					

Current SNMP Managers Table:

IP	ALIAS	GROUP	NODE CLASS	NODE NAME	INSTANCE	VERSION	PORT	COMMUNITY	DELETE
10.10.10.10	custsnmp1	SNMP	MANAGER	ve2upm1	10.45.26.193	2	162	public	<input type="button" value="X"/>
10.10.10.20	custsnmp2	SNMP	MANAGER	ve2upm1	10.45.26.193	2	162	public	<input type="button" value="X"/>

Click to unregister a manager

To register a new manager, enter details and click Submit

Registering/Unregistering Northbound Managers

Defines where events (alarms) are forwarded.

```
upm1:root:mshell> register_manager -g snmp -h 10.230.1.140 -a cust1  
SNMP Manager Listing
```

NodeClass	NodeName	NodeInstance	Manager Address	Port	Version	Alias
MANAGER	MANAGER1	10.230.12.57	10.230.1.140	162	2	cust1

```
upm1:root:mshell>
```

```
upm1:root:mshell> unregister_manager -g snmp -h 10.230.1.140  
SNMP Manager Listing
```

NodeClass	NodeName	NodeInstance	Manager Address	Port	Version	Alias
-----------	----------	--------------	-----------------	------	---------	-------

```
upm1:root:mshell>
```

Review Questions

1. Which of the following actions is not available in the GUI of managing monitors?
 - a. Execute
 - b. Delete
 - c. Disable
 - d. Pause
2. Which tab is used for defining northbound manages?
 - a. Alarm
 - b. Monitor
 - c. Administration
 - d. Managers
3. What is the possible communication method between the UMP and the northbound managers?
 - a. SMS
 - b. SNMP
 - c. SMTP
 - d. All of the above

Agenda

UPM Overview and Concepts

UPM Alarms and Events

UPM Process Management

UPM Jobs and Workflows

UPM Inventory Reports

Logs and File Management

Administering the UPM

Types of Processes

Processes in Comverse ONE

Instrumented

Can be accessed and controlled from the UPM

Continuous – run continuously

Batch – start at a predetermined time

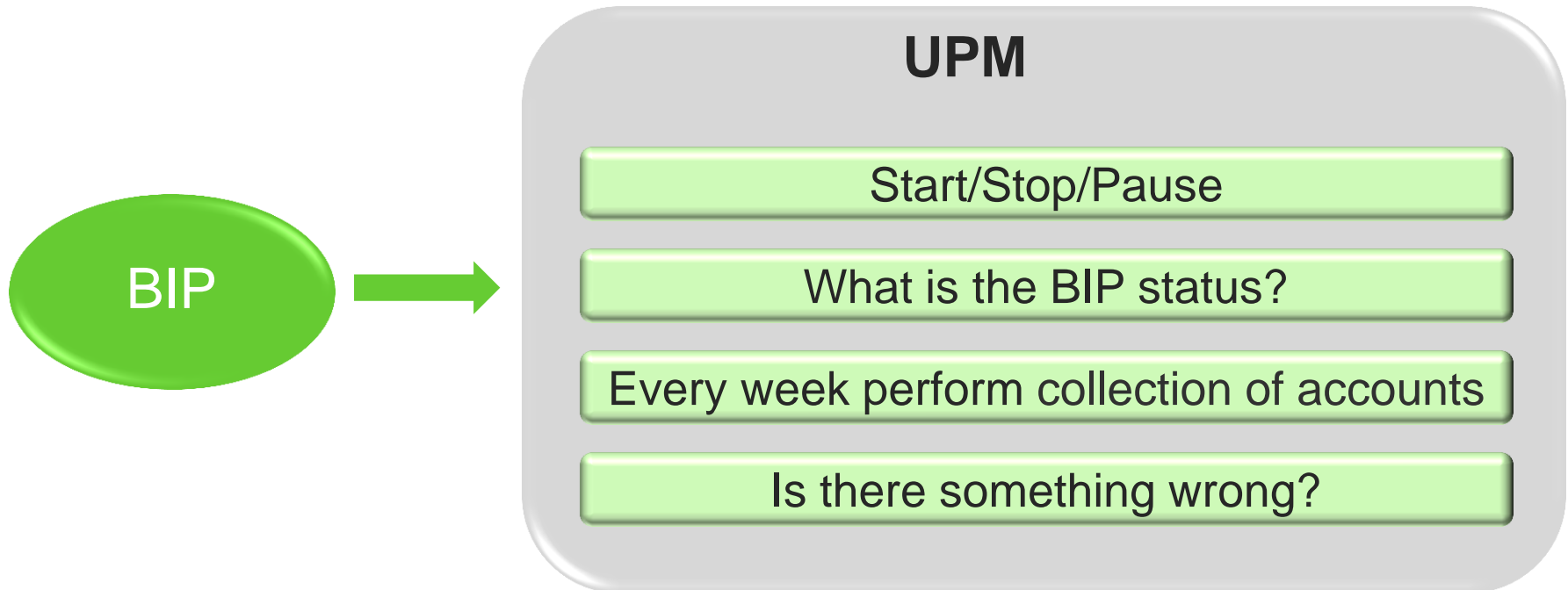
Noninstrumented

The UPM can only monitor their existence and perform start/stop

Can be started, shut down, suspended, and resumed from the UPM

Process Management

- A remote interface to view processes, determine their status, and control their life cycle
- An interface to any UPA to send alarms and track the health of a long-running process



Comverse ONE Managed Objects

ADMIN	Admin/Catalog Database Server
ASU	Network Self Care Application Server
BILLING	Billing Database Server
CMS	Comverse Media Server
DGU	Diameter Gateway Unit
DMROAM	Date Mediation and Roaming Server
SAPI	Single API Server, Request Handling and Tracking Server
SDP	Rating Database Server
SECSERV	Standalone Security Server
SGU	Signaling Gateway Unit
URE	Unified Rating Engine (instances configured for input messages)

Processes for the ASU, DGU Node Types

ASU:

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
IVR	Yes	Noninstrumented	Continuous

DGU:

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
OMNI	No	Noninstrumented	Continuous

Processes for the Billing Node Type

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
AMP process type	No	Instrumented	Batch
APN process type	Yes	Instrumented	Batch
ARCH process type	No	Instrumented	Batch
ARM process type	Yes	Instrumented	Batch
ARMSERV process type	Yes	Instrumented	Batch
BID process type	Yes	Instrumented	Batch
BIP process type	Yes	Instrumented	Batch
BIP (server) process type	Yes	Instrumented	Continuous
CAS process type	Yes	Instrumented	Batch
CMCAP process type	Yes	Instrumented	Batch
COM process type	Yes	Instrumented	Batch
CPM process type	Yes	Instrumented	Batch
EFT process type	Yes	Instrumented	Batch
HDP process type	Yes	Instrumented	Batch
IGEN process type	Yes	Instrumented	Batch
IGEN (server) process type	Yes	Instrumented	Continuous
JNL process type	Yes	Instrumented	Batch
LBX process type	Yes	Instrumented	Batch
LTP process type	Yes	Instrumented	Continuous
LWSERV process type	Yes	Instrumented	Batch
MIUB process type	Yes	Instrumented	Batch
RCS (server) process type	Yes	Instrumented	Continuous
SCOM process type	Yes	Instrumented	Batch
SIN process type	Yes	Instrumented	Batch
TAO_IREP	Yes	Noninstrumented	Continuous
TAO_NS	Yes	Noninstrumented	Continuous
TSP	Yes	Noninstrumented	Continuous
TSS process type	Yes	Instrumented	Batch
UFA process type	Yes	Instrumented	Batch
URC process type	Yes	Instrumented	Batch

Processes for the Manager (UPM) Node Type

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
CMCAP process type (used on this node type for outage record processing)	Yes	Instrumented	Batch
COM process type (used on this node type for outage record processing)	Yes	Instrumented	Batch
MIUB process type	Yes	Instrumented	Batch
ORLTP process type	Yes	Instrumented	Continuous
ORLTP process type (batch)	Yes	Instrumented	Batch
SMSGW (Kannel SMS Gateway)	Yes	Noninstrumented	Continuous
UFA process type	Yes	Instrumented	Batch

Processes for the OFFRATER, ONRATER Nodes Types

OFFRATER:

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
CCAP process type	Yes	Instrumented	Batch
TSP	Yes	Noninstrumented	Continuous

ONRATER:

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
OMNI	No	Noninstrumented	Continuous

Processes for the RHT, SAPI Nodes Type

RHT:

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
ASync	Yes	Noninstrumented	Continuous
RHT	Yes	Noninstrumented	Continuous


SAPI:

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
SAPI (Single API, also known as the Unified API)	Yes	Noninstrumented	Continuous

Processes for the SDP Node Type

Process Name/ Process Type	Managed by the Unified Platform?	Instrumented/ Noninstrumented	Batch/ Continuous
AMP process type Real Time only	No	Instrumented	Batch
DWH (Data Warehouse: optional component) Real Time only	Yes	Instrumented	Batch
MHT process type Converged only	Yes	Instrumented	Continuous
RCS process type Real Time only	Yes	Instrumented	Batch
RCS (server) process type Real Time only	Yes	Instrumented	Continuous
RCT process type Converged only	Yes	Instrumented	Continuous
SDSAGENT (Recharge Agent)	Yes	Noninstrumented	Continuous
TSP Real Time only	Yes	Noninstrumented	Continuous
URR process type Converged only	Yes	Instrumented	Continuous
URT process type Converged only	Yes	Instrumented	Continuous

UPM GUI – Process Tab

COMVERSE  Comverse ONE
Unified Platform

HOME EVENT TASK INVENTORY **PROCESS** PROVISIONING

>>

Status Work Flow

Current History

Action: Submit

SiteId	Class	NodeName	NodeInstance	Name	Status	PID	Action
CTD	rht	sapi2	10.106.106.12	rht_ma			-Select- ▼
CTD	rht	sapi2	10.106.106.12	rht_adr			-Select- ▼
CTD	sapi	sapi1	10.106.106.11	sapi_manage	running	8284	-Select- ▼
CTD	sapi	sapi1		_admin	running	4387	-Select- ▼
CTD	manager	upm		gw	running	10136	-Select- ▼
CTD	asu	asu1					-Select- ▼
CTD	dgu	dgu1	10.106.106.30	omni	noexec	--	-Select- ▼
CTD	slu	orp1	10.106.106.23	tsppcap	noexec	--	-Select- ▼
CTD	offrater	ofr1	10.106.106.22	tsppcap	noexec	--	-Select- ▼
CTD	slu	slu1	10.106.106.16	tsppcap	noexec	--	-Select- ▼
CTD	sgu	sgu1a	10.106.106.14	omni	noexec	--	-Select- ▼

Select action, then click Submit

Click a row to view details

List Process

group

type

```
upm1:root:mshell> list_processes -g application -t NI -i Group,NodeClass,NodeName,NodeInstance
```

Process Listing

Name	Pid	State	Status	Type	ModuleName	PrevFireTime	NextFireTime	Valid
smsgw	19139	ENABLED	running	non-instrumented	--	15:02:09	05/01/2008	VALID

```
upm1:root:mshell>
```

List Process Properties

list_process_properties

group

Process
name

```
kosa4:root:mshell> list_process_properties -g application -p smsgw -i NodeClass,NodeInstance
```

NodeName	Name	Value	Message
MANAGER1	module.group	application	--
MANAGER1	module.resource.group	host_rg	--
MANAGER1	module.schedule.format	cron	--
MANAGER1	module.type	process	--
MANAGER1	module.valid	valid	--
MANAGER1	process.agent.stop	true	--
MANAGER1	process.description	Kannel sms-gw	--
MANAGER1	process.memory.expression	0 0/2 * * * ?	--
MANAGER1	process.monitor.expression	0 * * * * ?	--
MANAGER1	process.monitor.path	/usr/local/jboss/process/smsgwMonitor.pl	--
MANAGER1	process.monitor.timeout	5	--
MANAGER1	process.monitor.user	root	--
MANAGER1	process.name	smsgw	--
MANAGER1	process.start.expression		--
MANAGER1	process.start.path	/usr/local/jboss/process/smsgwStart.pl	--
MANAGER1	process.start.timeout	10	--
MANAGER1	process.start.user	root	--
MANAGER1	process.terminate.path	/usr/local/jboss/process/smsgwstop.pl	--
MANAGER1	process.terminate.timeout	10	--
MANAGER1	process.terminate.user	root	--

```
kosa4:root:mshell>
```

List Process Types

```
sdpl:root:mshell> list_process_types
```

```
Process Types List
```

```
CMCAP
```

```
BIP
```

```
UFA
```

```
ARCH
```

```
TSS
```

```
ARMSERV
```

```
RCS
```

```
COM
```

```
ARM
```

```
EFT
```

```
LTP
```

```
IGEN
```

```
SIN
```

```
MIUB
```

```
ORLTP
```

```
LBX
```

```
JNL
```

```
URC
```

```
LWSERV
```

```
HDP
```

```
CPM
```

```
BID
```


Disable/Enable a Process

group

Process
name

```
upm1:root:mshell> disable_process -g application -p smsgw -i NodeClass,NodeInstance
```

```
Disabled Process Listing
```

NodeName	Group	Process	Duration	Message
manager1	application	smsgw	--	Operation Successful

```
upm1:root:mshell>
```

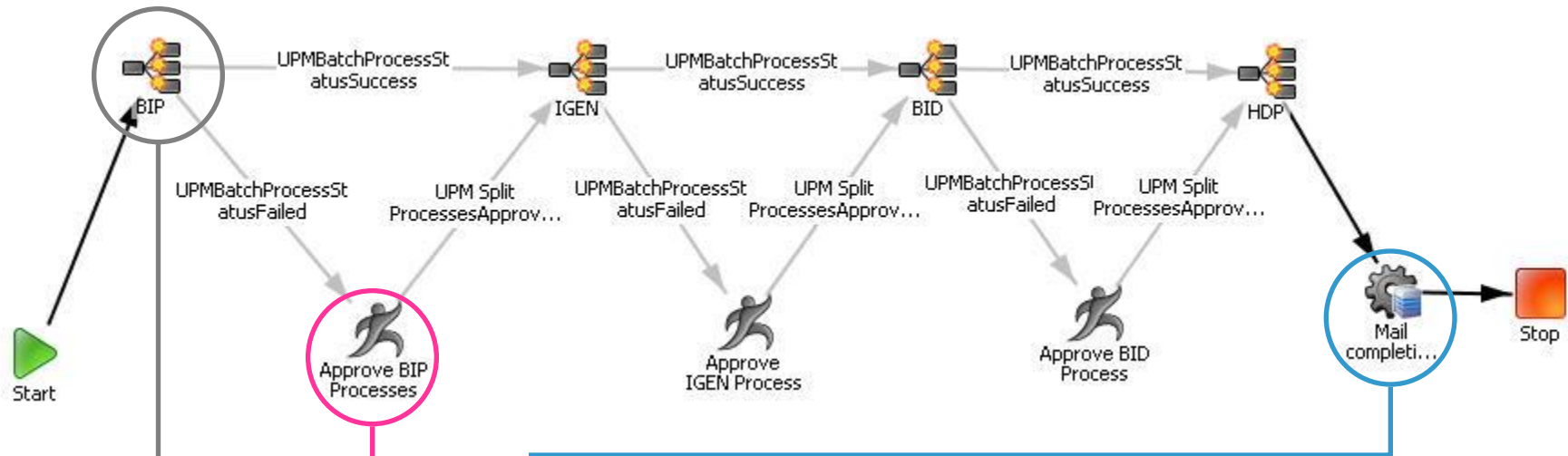
```
upm1:root:mshell> enable_process -g application -p smsgw -i NodeClass,NodeInstance
```

```
Enabled Process Listing
```

NodeName	Group	Process	Message
manager1	application	smsgw	Operation Successful

```
upm1:root:mshell>
```

Business Workflow

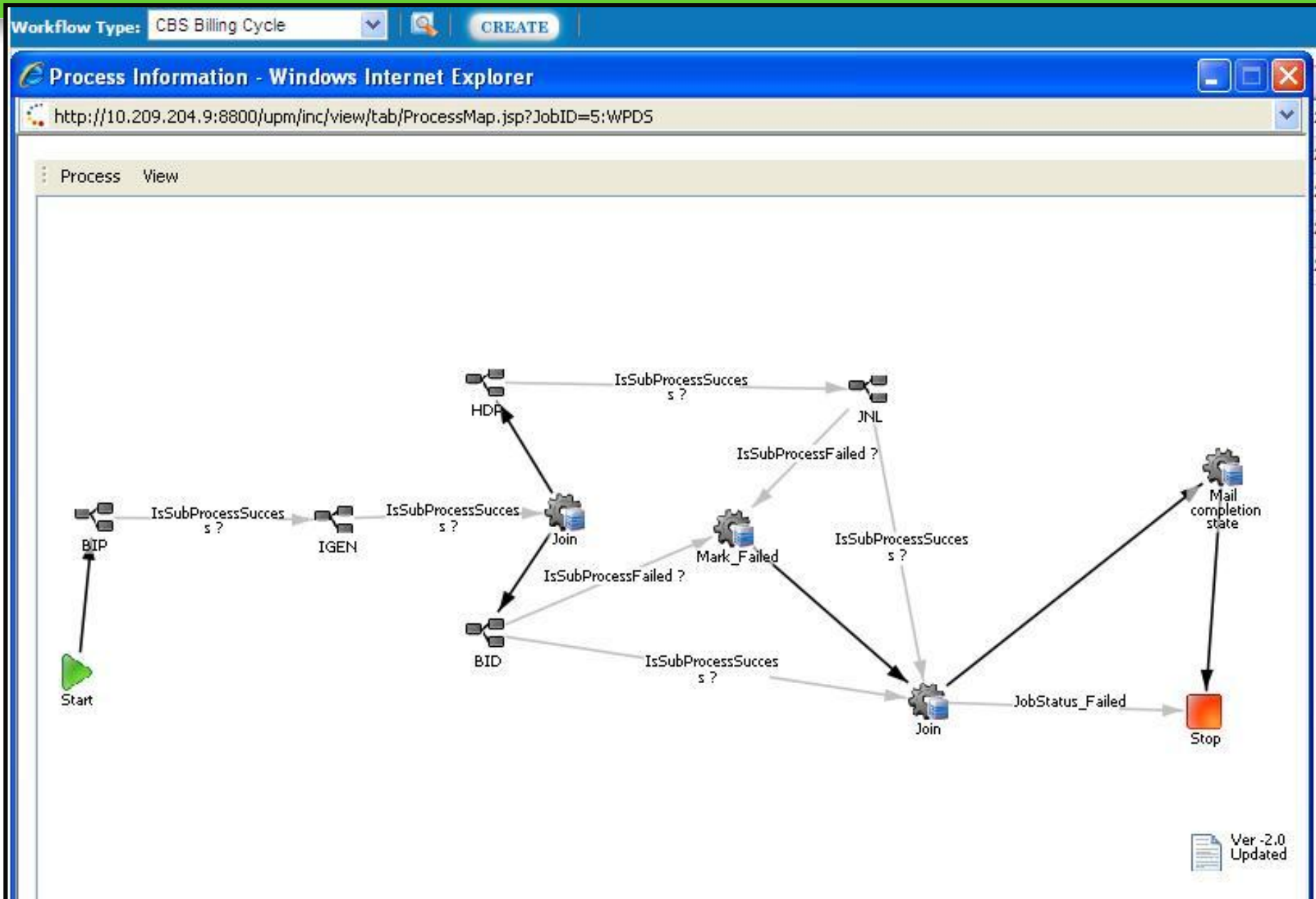


Process is automatically triggered

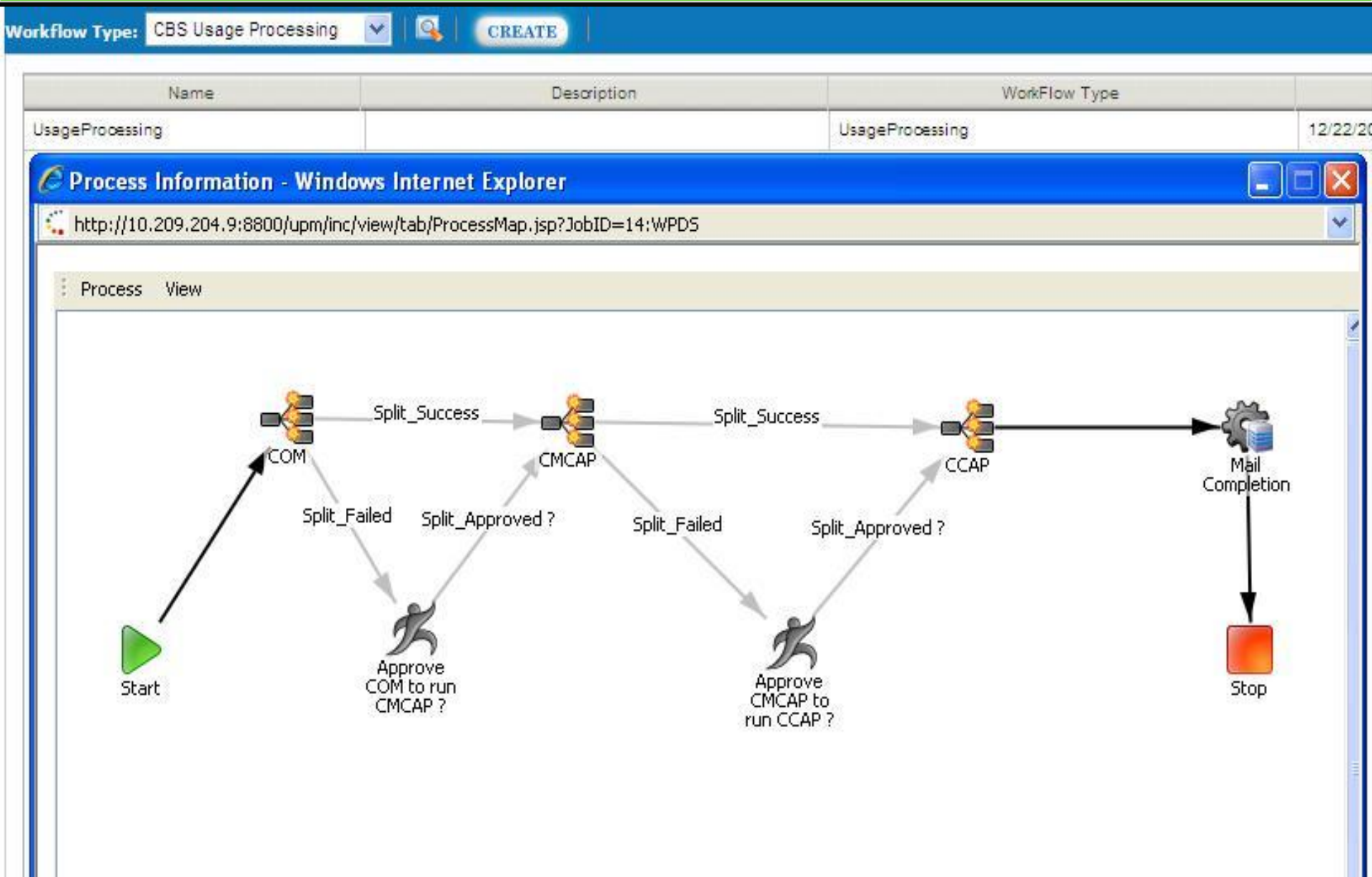
Process requiring manual input

Process that can be split into multiple instances

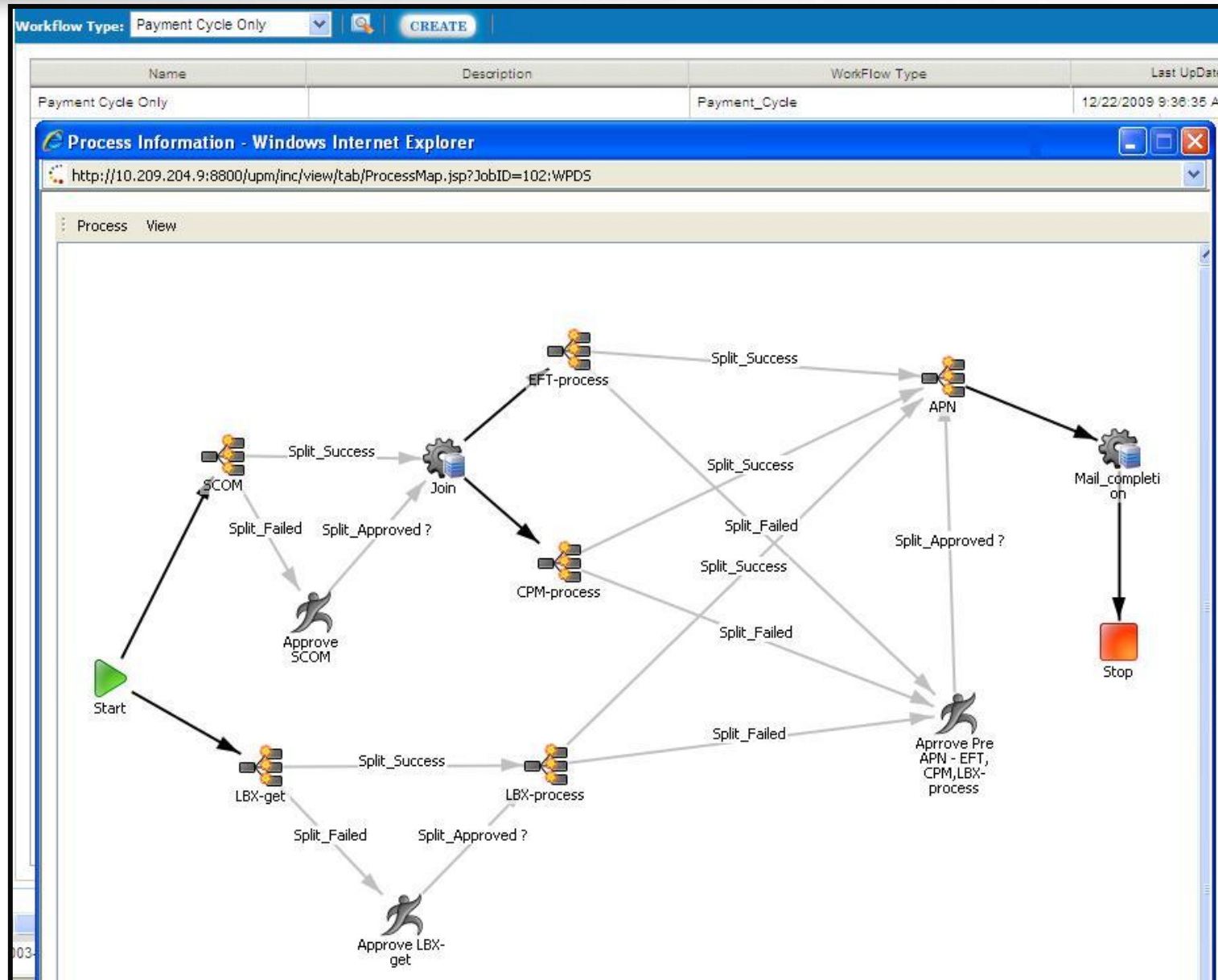
UPM GUI – Billing Cycle Workflow



UPM GUI – Usage Processing Workflow



UPM GUI – Payment Cycle Workflow



Review Questions

1. What are instrumented processes?
 - a. Can be accessed and controlled from the UPM
 - b. The UPM can only monitor their existence and perform start/stop
 - c. Always run continuously
 - d. Always start at a predetermined time
2. How can you view a list of instrumented process types on a specific node? (2 correct answers)
 - a. Using the UPM GUI
 - b. On the node, use the `ps -ef` command
 - c. On the node, use `List_process_types` command
 - d. On the UPM, use `List_process` command with the node as a parameter
3. When will you use the “Reload” action on a process?
 - a. To enable it after it has been disabled
 - b. To start execution after it has been stopped
 - c. After changes to its configuration properties
 - d. All of the above

Agenda

UPM Overview and Concepts

UPM Alarms and Events

UPM Process Management

UPM Jobs and Workflows

UPM Inventory Reports

Logs and File Management

Administering the UPM

What Are Jobs and Workflows?

Job

A periodic or on-demand operation that is performed on a node, such as purging of database records



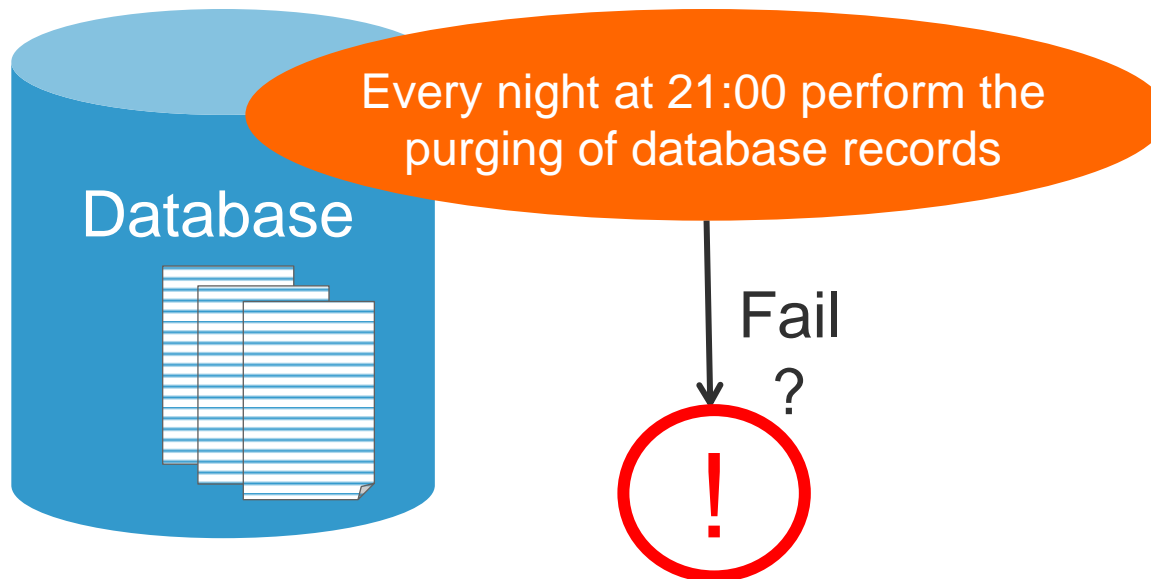
Workflow

- The interaction of workflow entities
- A workflow entity can be any simple or complex job, monitor



Job and Workflow Management

- Periodic and manual scheduling
- Historical reports
- A remote interface to view jobs and workflows, determining status and statistics



UPM GUI – Task Tab: Job Management

Comverse ONE Unified Platform | task - Windows Internet Explorer

http://10.106.106.6:8800/upm/task.iface

COMVERSE Comverse ONE Unified Platform

HOME EVENT **TASK** INVENTORY PROCESS PROVISIONING

>>

Job Work Flow

Current History Upload

Action: Execute Submit

Execute
Enable
Disable
Pause
Resume
Reload

		NodeName	NodeInstance	Name	Group	State	
CTD		sdp1	10.106.106.8	check_cur_ver	database	ENABLED	<input type="checkbox"/>
CTD		sdp1	10.106.106.8	check_slave_reg	database	ENABLED	<input type="checkbox"/>
CTD	BILLING	sdp1	10.106.106.7	msf-logrotate	log	ENABLED	<input type="checkbox"/>
CTD	SDP	sdp1	10.106.106.8	listener_logrotate	database	ENABLED	<input type="checkbox"/>
CTD	ASU	asu1	10.106.106.13	up_conf-filedatacollect	config	ENABLED	<input type="checkbox"/>
CTD	ASU	asu1	10.106.106.13	asu-filetransfer	log	ENABLED	<input type="checkbox"/>
CTD	ASU	asu1	10.106.106.13	ivr-backup	application	ENABLED	<input type="checkbox"/>
CTD	ASU	asu1	10.106.106.13	ivr-restore	application	ENABLED	<input type="checkbox"/>
CTD	ASU	asu1	10.106.106.13	reload_environment	application	ENABLED	<input type="checkbox"/>

Uploading a Job

Job





Work Flow

Current

History

Upload

Upload

NAME ▲	DATE/TIME
 application	01/25/2010 11:45:00 AM
 database	01/25/2010 11:45:00 AM
 host	01/25/2010 11:45:00 AM
 log	01/25/2010 11:45:00 AM

Job



Work Flow

Current

History

Upload

Upload

NAME ▲	DATE/TIME
 //sapi/log	
 test_example.cfg	01/27/2010 10:34:00 AM

Submit

Viewing Jobs Scheduling

list_jobs

Node
name

```
kosa4:root:mshell> list_jobs -mon sdp1 -i NodeClass,NodeName,NodeInstance,TimeZone
```

Job Listing

Group	Name	State	NextFireTime	Valid	
database	arcmgr	ENABLED	15:30:00 04/30/2008	VALID	--
database	backup_level0	ENABLED		VALID	--
database	listener_logrotate	ENABLED	23:55:00 04/30/2008	VALID	--
database	recomp_inv_object	ENABLED	16:30:00 04/30/2008	VALID	--
database	recomp_inv_object	ENABLED	16:25:00 04/30/2008	VALID	--
database	run_gather_stats	ENABLED	22:10:00 04/30/2008	VALID	--
database	run_gather_stats	ENABLED	22:05:00 04/30/2008	VALID	--
database	tape_backup	ENABLED		VALID	--
log	msf-filetransfer	ENABLED		VALID	--
log	msf-logcollect	ENABLED		VALID	--
log	msf-logpurge	ENABLED	23:55:00 04/30/2008	VALID	--
log	msf-logrotate	ENABLED	16:10:00 04/30/2008	VALID	--
log	msf-purge-log	ENABLED	00:00:00 05/01/2008	VALID	--
log	msf_event-logcollect	ENABLED		VALID	--
log	msf_job-logcollect	ENABLED		VALID	--
log	msf_jobdbg-logcollect	ENABLED		VALID	--
log	msf_task-logcollect	ENABLED		VALID	--
log	ora-logrotate	ENABLED	23:55:00 04/30/2008	VALID	--
log	ora_dbc-logpurge	ENABLED	23:55:00 04/30/2008	VALID	--
log	sdpmmon-logrotate	ENABLED	15:45:00 04/30/2008	VALID	--

Viewing Currently Running Jobs

list_running_jobs

Node
name

```
kosa4:root:mshell> list_running_jobs -mon sdp1 -i NodeClass,NodeName,NodeInstance,TimeZone  
Running Job Listing
```

Group	Name	Instance	State	Status	Start	End	NextFireTime	Duration
database	arcmgr		COMPLETE	OK	15:00:00.016	15:00:00.650	15:30:00.000	0:0:0.634
log	msf-logrotate		COMPLETE	OK	15:10:00.442	15:10:00.698	16:10:00.000	0:0:0.256

```
kosa4:root:mshell>
```

Viewing Jobs Properties

list_jobs_properties

Resource
group

Job name

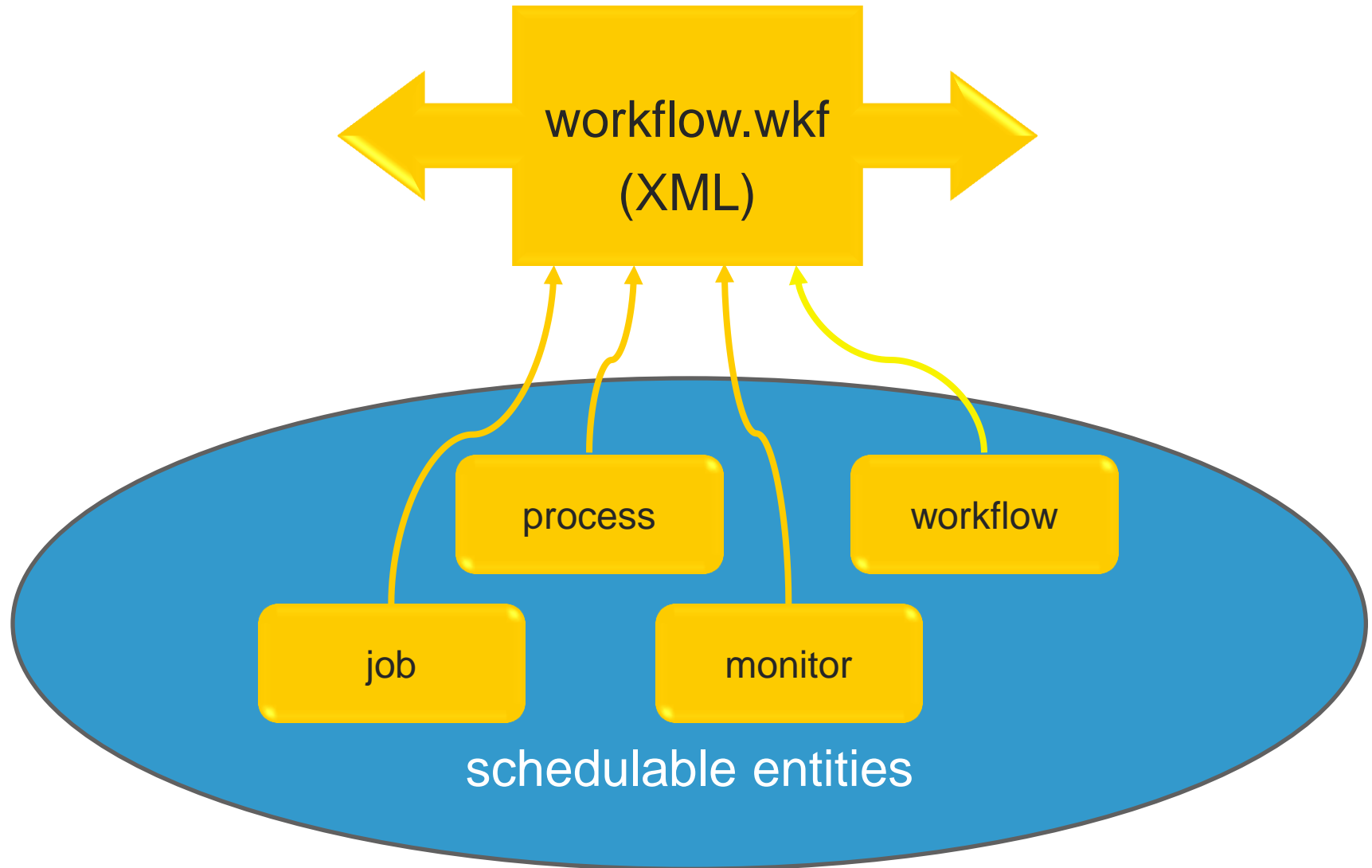
Node
name

```
kosa4:root:mshell> list_job_properties -g log -j msf-logcollect -mon sdp1  
-i NodeClass,NodeName,NodeInstance
```

LOG.msf-logcollect is currently VALID with a ENABLED state

Name	Value	Message
blackoutPeriod	--	--
handlerPolicy	job	--
handlerType	job	--
log.1.name	/usr/local/jboss/log/mshell.*	--
log.2.name	/usr/local/jboss/log/wrapper.*	--
log.collect.path	/var/msf/transfers/logcollection/msf_sdp1-logfiles.z	--
log.collect.total	2	--
module.description	Collect Logs for Management Agent	--
module.group	log	--
module.id	ALERT_LOG	--
module.resource.group	host_rg	--
module.schedule.format	cron	--
module.valid	valid	--

Maintenance Workflow



UPM GUI – Task Tab

build_report

Comverse ONE Unified Platform | task - Windows Internet Explorer

http://10.106.106.6:8800/upm/task.iface

COMVERSE Comverse ONE Unified Platform

HOME EVENT **TASK** INVENTORY PROCESS PROVISIONING

>>

Job Work Flow

Current History Upload

Action: Execute Submit

- Execute
- Enable
- Disable
- Pause
- Resume
- Reload

		NodeName	NodeInstance	Name	Group	State	Valid	
CTD		u1	10.106.106.13	continous_process_start	application	ENABLED	VALID	<input type="checkbox"/>
CTD		u1	10.106.106.13	continous_process_stop	application	ENABLED	VALID	<input type="checkbox"/>
CTD	ASU	asu1	10.106.106.13	dr_process_start	application	ENABLED	VALID	<input type="checkbox"/>
CTD	ASU	asu1	10.106.106.13	msf-logtransfer	log	ENABLED	VALID	<input type="checkbox"/>
CTD	BILLING	sdp1	10.106.106.7	continous_process_start	application	ENABLED	VALID	<input type="checkbox"/>
CTD	BILLING	sdp1	10.106.106.7	continous_process_stop	application	ENABLED	VALID	<input type="checkbox"/>
CTD	BILLING	sdp1	10.106.106.7	dr_process_start	application	ENABLED	VALID	<input type="checkbox"/>
CTD	BILLING	sdp1	10.106.106.7	msf-logtransfer	log	ENABLED	VALID	<input type="checkbox"/>
CTD	DGU	dgu1	10.106.106.30	continous_process_start	application	DISABLED	VALID	<input type="checkbox"/>
CTD	DGU	dgu1	10.106.106.30	continous_process_stop	application	ENABLED	VALID	<input type="checkbox"/>

Viewing Workflow Schedule

list_workflows

```
kosa4:root:mshell> list_workflows -mon sdp1 -i NodeClass,NodeName,NodeInstance,TimeZone
```

Workflow Listing

Group	Name	State	NextFireTime	Valid	Blackout
database	ora_db_backup	ENABLED	00:30:00 05/06/2008	VALID	--
log	msf-logtransfer	ENABLED		VALID	--

```
kosa4:root:mshell>
```

list_running_workflows

```
upm1:root:mshell> list_running_workflows -i NodeClass,NodeName,NodeInstance,TimeZone
```

Running Job Listing

Group	Name	Instance	State	Status	Start	End	NextFireTime	Duration
log	msf-logtransfer	msf-logtransfer	RUNNING	--	15:50:20.784	--	--	0:2:54.816

```
upm1:root:mshell>
```

Viewing Workflow Report

build_report

```
upm1:root:mshell> build_report -r workflow -mon sdp1 -i nodeclass,nodename,timeZone
```

WORKFLOW EXECUTION HISTORY REPORT

Date	Time	Name	State	Status	start	End	duration
05/13/2008	12:13	MSF-LOGTRANSFER	COMPLETE	OK	12:12:57.432	12:13:13.767	0:0:16.355

```
upm1:root:mshell>
```

Review Question

Which of the following entities can be part of a workflow?

1. Jobs
2. monitors
3. Workflows
4. All of the above

Agenda

UPM Overview and Concepts

UPM Alarms and Events

UPM Process Management

UPM Jobs and Workflows

UPM Inventory Reports

Logs and File Management

Administering the UPM

Inventory Management

Inventory examples:

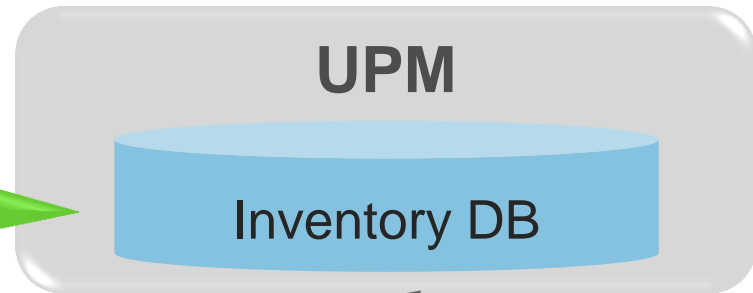
- Disk
- Memory
- Processor
- Software
- Network

Scripts for each type

- Run on the nodes at predefined schedules
- Collect the local inventory data

Inventory data is forwarded periodically to the UPM

Data is stored in the central System Inventory database on UPM.



UPM GUI – Inventory Tab

Comverse ONE Unified Platform | inventory - Windows Internet Explorer

http://10.106.106.6:8800/upm/inventory.iface

COMVERSE Comverse ONE Unified Platform

HOME EVENT TASK **INVENTORY** PROCESS PROVISIONING

>> Inventory

Software Disk Memory Network Processor

Site Id	Class	NodeName	NodeInstance	Name	Version	Release	Vendor
CTD	ASU	asu1	10.106.106.13	CBS_Weblogic10.3	3.1.0	0.6	Comverse, Inc
CTD	ASU	asu1	10.106.106.13	CBS_ASU	3.2.20.0	0.0.0_8.0.1	Comverse, Inc
CTD	ASU	asu1	10.106.106.13	RTB-CBS-mt	1.0.0	1	Comverse Technology
CTD	BILLING	sdp1	10.106.106.7	CBS_RCS_Rating	3.2.20.0	0.0.0_7.0.1	Comverse, Inc
CTD	BILLING	sdp1	10.106.106.7	CBS_RCS_SERVER	3.2.20.0	0.0.0_7.0.1	Comverse, Inc
CTD	BILLING	sdp1	10.106.106.7	CBS_INV	3.2.20.0	0.0.0_8.0.1	Comverse, Inc
CTD	BILLING	sdp1	10.106.106.7	CBS_BILLING	3.2.20.0	0.0.0_8.0.1	Comverse, Inc

View Inventory Types

```
upm1:root:mshell> list_inventory_type
```

```
LIST INVENTORY TYPE
```

NodeClass	NodeName	NodeInstance	Name
MANAGER	MANAGER1	10.210.156.164	disk
MANAGER	MANAGER1	10.210.156.164	software
MANAGER	MANAGER1	10.210.156.164	memory
MANAGER	MANAGER1	10.210.156.164	networkadaptor
MANAGER	MANAGER1	10.210.156.164	processor
MANAGER	MANAGER1	10.210.156.164	switch
MANAGER	MANAGER1	10.210.156.164	port

```
upm1:root:mshell>
```

View Inventory

Inventory type

```
upm1:root:mshell> list_inventory -inv memory
```

SiteID	NodeClass	NodeName	NodeInstance	Name	TotalSize	SwapSize
DITSITE	MANAGER	MANAGER1	10.210.156.164	--	503MB	996MB
DEVSITE	ONRATER	perfs1u18	10.230.18.16	--	2006MB	1898MB
PREDIT41	SAPI	sapi_dit4_1	10.230.20.158	--	1898MB	1898MB
DEVSITE	SDP	MAIN1	10.230.19.221	mem0	7808MB	--
DEVSITE	SDP	MAIN2	10.230.19.224	mem0	7808MB	--
DEVSITE	SGU	kssp1	10.230.17.149	--	2006MB	1898MB

```
upm1:root:mshell>
```


Exporting Inventory Data – Sample

Create the export file

Inventory type

Node class

```
upm:root:mshell> export_inventory -inv memory -c sdp
```

Status message:

Operation Successful

Locate it

```
root@upm: /> cd /var/msf/transfers/export/
```

```
root@upm: export> ls
```

```
upm_inventory_memory_sdp_export.csv
```

Review Questions

How can you see all available inventory reports?

1. Using the GUI
2. Using List_inverntory_type CLI command
3. Using List_inverntory CLI command
4. Using export_inventory CLI command

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Log and File Management

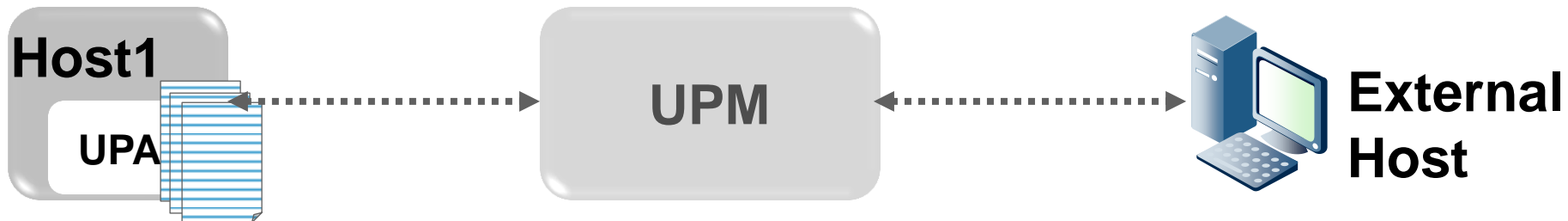
Log Management

- Rotating logs according to size or date
- Purging logs according to age
- Archiving specified logs to a specified location



File Management

- Transfer of files to and from an external host or the UPM



UPM GUI – Task Tab

Comverse ONE Unified Platform | task - Windows Internet Explorer

http://10.106.106.6:8800/upm/task.iface

COMVERSE Comverse ONE Unified Platform

HOME EVENT **TASK** INVENTORY PROCESS PROVISIONING

SiteId	Class	NodeName	NodeInstance	Name	Group	State	Valid	
CTD	SDP	sdp1	10.106.106.8	ora_purge_phone	database	ENABLED	VALID	
CTD	BILLING	sdp1	10.106.106.7	ora_dbo-logpurge	log	ENABLED	VALID	06/01/2010 1
CTD	SDP	sdp1	10.106.106.8	ora_dbo-logpurge	log	ENABLED	VALID	06/01/2010 1
CTD	SDP	sdp1	10.106.106.8	ora_check_reserv	database	ENABLED	VALID	
CTD	SDP	sdp1	10.106.106.8	ora_card_st_tran	database	ENABLED	VALID	

1 2 3 4 5

Details Properties Blackouts

Details

Class	BILLING	Node Name	sdp1
Node Instance	10.106.106.7	Group	log
Name	BILLING.sdp1.10.106.106.7.ora_dbo-logpurge	State	ENABLED
Trigger Name	ora_dbo-logpurge-log	Previous FireTime	Mon May 31 23:55:00 IDT 2010
Next FireTime	Tue Jun 01 23:55:00 IDT 2010	Valid	VALID
Message	--	Blackout	--

Transferring Files from the UPA to UPM

Manually

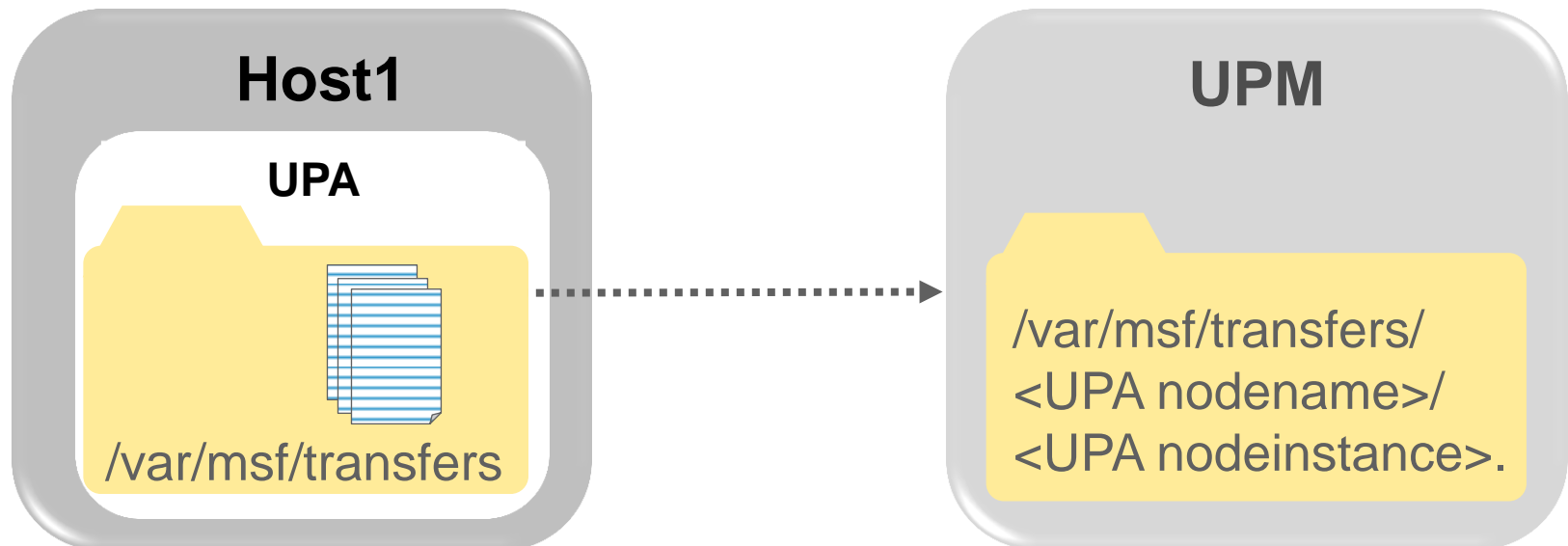
File location
and name

From node

```
upm1:root:mshell> file_send -l /logcollection/msf_sdp1-logfiles.zip -mon sdp1
```

NodeClass	NodeName	NodeInstance	FileName	Message
BILLING	sdp1	10.230.19.65	/logcollection/msf_sdp1-logfiles.zip	Operation Successful

```
upm1:root:mshell>
```



Displaying a List of Files Available for File Transfer

```
upm1:root:mshell> list_files -mon sdp1
```

List Files

NodeClass	NodeName	NodeInstance	Name	File	Timestamp
BILLING	sdp1	10.230.19.65	logcollection	--	12:12 05/13/2008
BILLING	sdp1	10.230.19.65	graphs	--	12:01 01/16/2008

```
upm1:root:mshell> list_files -mon sdp1 -d logcollection
```

List Files

NodeClass	NodeName	NodeInstance	Name	File	Timestamp
BILLING	sdp1	10.230.19.65	msf_sdp1-logfiles.zip	Y	12:12 05/13/2008

```
upm1:root:mshell>
```

Directories

File

Transferring Files to an External Host Manually

Username

Password

Host IP

filename

```
upm1:root:mshell> file_send -u sysops -p sysops -h 10.150.1.142 -l /usr/local/jboss/log/wrapper.log  
-r /home/sysops/wrapper_sdp1.log -i NodeClass,NodeName,NodeInstance
```

UserName	Password	HostName	LocalFileName	RemoteFileName	Message
sysops	sysops	10.150.1.142	/usr/local/jboss/log/wrapper.log	/home/sysops/wrapper_sdp1.log	Operation Successful

```
upm1:root:mshell>
```


Viewing the File Transfer History

Report
type

```
upm1:root:mshell> build_report -r filetransfer -mon sdp1 -i NodeClass,NodeName,NodeInstance,LocalFile,Start,End,Duration
```

FILE TRANSFER EXECUTION HISTORY REPORT

Date	Time	Name	Mode	State	Status	RemoteHost	RemoteFile	Info
05/19/2008	09:10	FILE_SEND	EMBEDDED	OK	COMPLETE	10.230.12.57	/SDP1/10.230.19.65/	OPERATION SUCCESSFUL

```
upm1:root:mshell>
```

Review Questions

1. Which tab is used for log management?
 - a. Event
 - b. Task
 - c. Inventory
 - d. Processes
2. What is the default location on the UPM of files transferred?
 - a. /var/msf/transfers
 - b. /var/msf/incoming
 - c. /var/msf/transfers/ <UPA nodename>/ <UPA nodeinstance>.
3. Which CLI command is used to view which files are available for transfer?
 - a. List_files
 - b. Send_file
 - c. Build report -r filetransfer

Agenda

UPM Overview and Concepts

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Stop and Start Commands

From mShell

- restart -mon <node_name>
- status

Recommended
method of restart

From UNIX

- agent start
- agent stop
- agent dump
- agent restart

```
[root@localhost root]# agent start
Starting Management Agent...
[root@localhost root]# agent status
Management Agent is running (1776).
[root@localhost root]# mshell
```

Version and Status

Check the version of your operating system, by typing:
mshell> version

```
upm1:root:mshell> version -i NodeClass,NodeName,NodeInstance
```

BuildID	Platform	OS Version	OS Model	OS Arch	Base
05/02/2008 02:39	Linux	2.6.18-8.el5	i686	i386	3.0.0.4

```
upm1:root:mshell>
```

Determining Operational Status of a UPA or UPM

```
upm1:root:mshell> status -mon sdpl -i NodeClass,NodeName,NodeInstance
```

Name	Registered	State	Uptime
LogWorkflowManager	true	Started	4 hrs and 2 mins
ProcessManager	true	Started	4 hrs and 2 mins
ApplicationWorkflowManager	true	Started	4 hrs and 2 mins
ApplicationResourceMonitor	true	Started	4 hrs and 2 mins
BoyscoutService	true	Started	4 hrs and 2 mins
EventTrapReceiver	true	Started	4 hrs, 1 min and 52 secs
WorkflowManager	true	Started	4 hrs and 2 mins
InventoryCollector	true	Started	4 hrs and 2 mins
EventTrapEmitter	true	Started	4 hrs, 1 min and 52 secs
DatabaseTaskManager	true	started	4 hrs, 2 mins and 1 sec
InternalProcessController	true	Started	4 hrs and 2 mins
InternalResourceMonitor	true	started	4 hrs and 2 mins
DatabaseProcessController	true	Started	4 hrs and 2 mins
DatabaseResourceMonitor	true	Started	4 hrs and 2 mins
EventsMSEmitter	true	Started	4 hrs, 1 min and 52 secs
ProcessHandler	true	Started	4 hrs, 1 min and 51 secs
MonitorManager	true	started	4 hrs and 2 mins
Recovery	true	Started	4 hrs, 1 min and 52 secs
DefaultWorkflowManager	true	Started	4 hrs and 2 mins

Viewing the Log Trace Level of UPA or UPM Loggers

```
upm2:root:mshell> get_trace_level
```

Loggers listing.

LoggerName	TraceLevel
org.jboss.management	INFO
EventXMLReceiver	DEBUG
EventTrapReceiver	DEBUG
EventObjectReceiver	DEBUG
EventLogEmitter	DEBUG
EventTrapEmitter	DEBUG
EventSMSEmitter	DEBUG
EventObjectEmitter	DEBUG
EventSMTPEmitter	DEBUG
ConfigurationManager	DEBUG
ConfigurationDataCollector	DEBUG
ConfigRepositoryManager	DEBUG
EventAPEmitter	DEBUG
BoyscoutService	DEBUG
EventManager	DEBUG
AsyncTaskAgent	DEBUG
AsyncTaskManager	DEBUG
SessionAgent	WARN
SessionManager	WARN
Recovery	DEBUG

Provide logger name or
view all

-r <loggername>

-mon <node>

Trace levels
can be:

- ERROR
- WARN
- INFO
- DEBUG
- TRACE

Changing the Log Trace Level of UPA or UPM Loggers

- Log files are located in the \$JBOSS_HOME/log directory.
- Changes to log trace levels take effect immediately and do not require a restart of the UPA/UPM.

Logger name

Node name

New log level

```
upm1:root:mshell> set_trace_level -r EventTrapEmitter -mon hsgu3b -l info
```

NodeClass	NodeName	NodeInstance	Message
SGU	hsgu3b	10.230.19.112	Level set to INFO for EventTrapEmitter

```
upm1:root:mshell>
```


Shutting Down the UPM

```
root@upm1 ~]#          su - oracle8

upm1:/oracle>          cd /oracle/oracle8/dba
upm1:/oracle/oracle8/dba> ./listener_start_stop stop
upm1:/oracle/oracle8/dba> ./oracle_start_stop stop all
upm1:/oracle/oracle8/dba> exit

[root@upm1 ~]#          manager stop
```

Starting Up the UPM

```
root@upm1 ~]#          su - oracle8

upm1:/oracle>          cd /oracle/oracle8/dba
upm1:/oracle/oracle8/dba> ./oracle_start_stop start all
upm1:/oracle/oracle8/dba> ./listener_start_stop start
upm1:/oracle/oracle8/dba> exit

[root@upm1 ~]#          manager start
```

Summary

This lesson has covered UPM functionality and the relevant operation for each service:

- Alarm and event
- Job management
- Process management
- File transfer