



Objectives

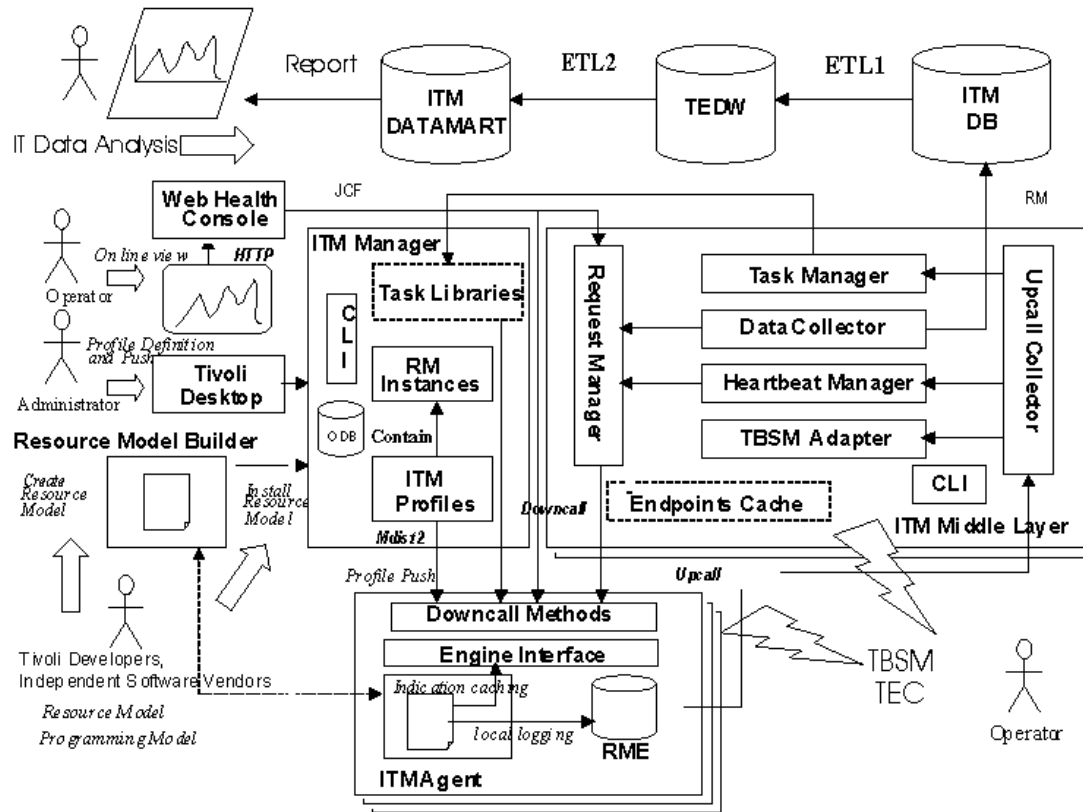
- Review WDI Operating Systems
- Tivoli Monitoring Architecture
- Monitoring WDI on z/OS
- Monitoring WDI on AIX
- Monitoring WDI on Windows
- Monitoring WebSphere MQ



Review WDI Operating Systems

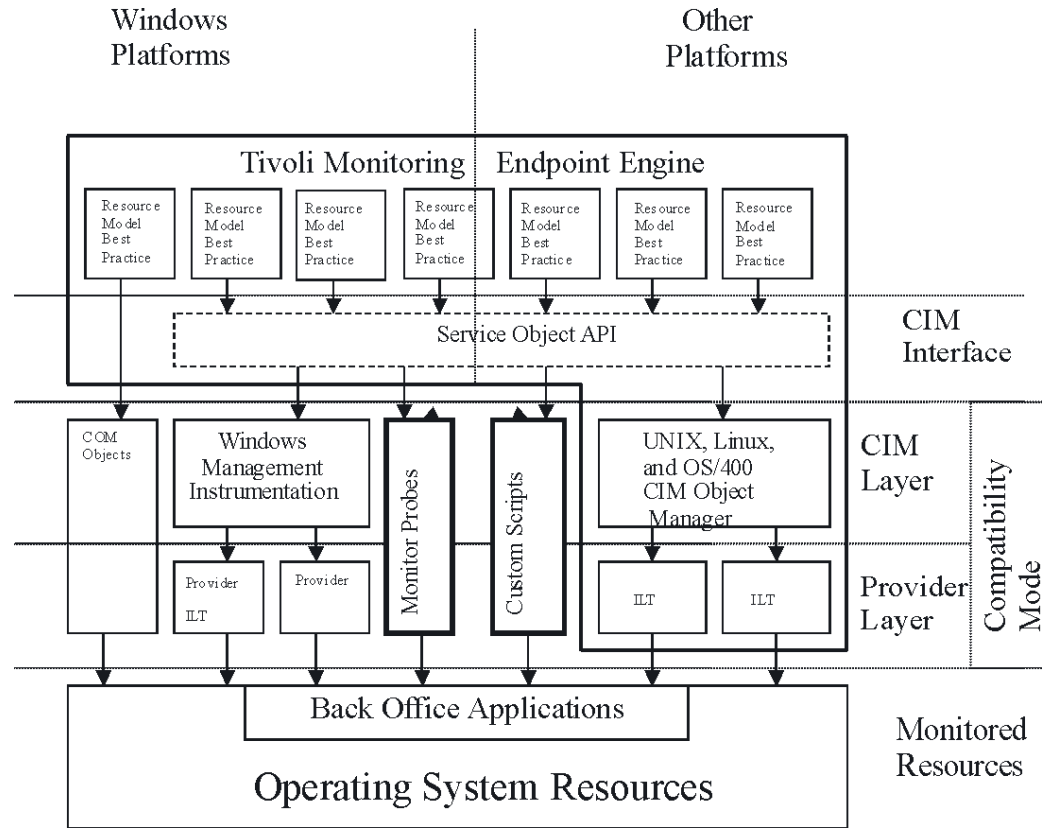
- WDI Currently Supports
 - z/OS
 - AIX 5.1 or higher
 - Windows 2000

Tivoli Monitoring Architecture

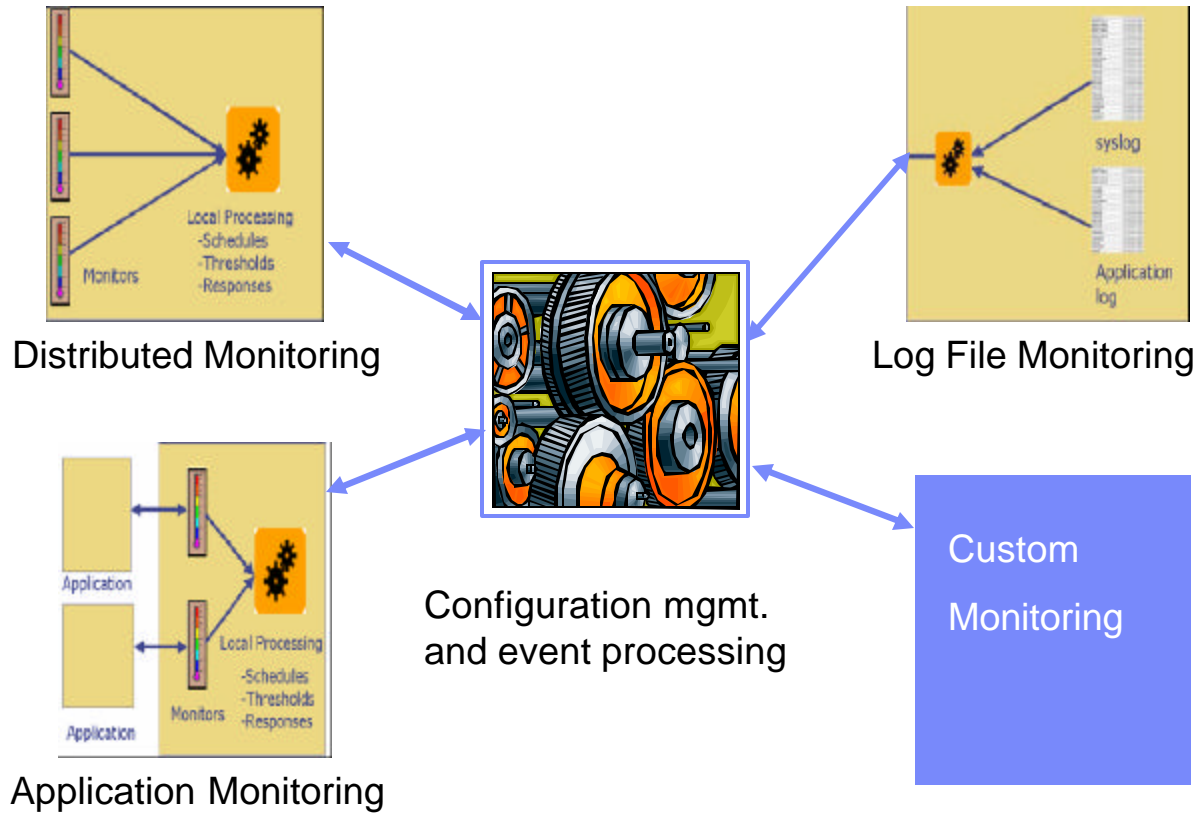


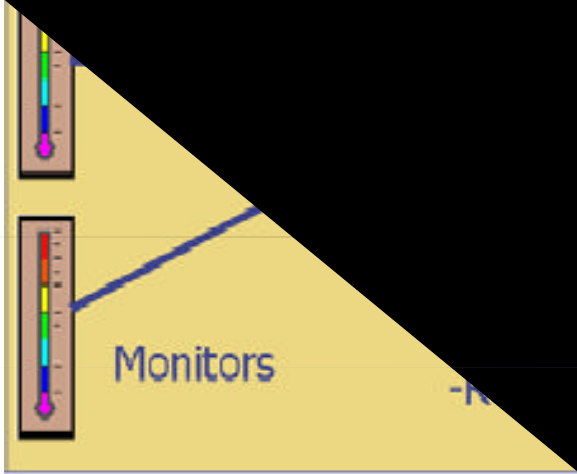


Architecture of Tivoli Resource Model Engine



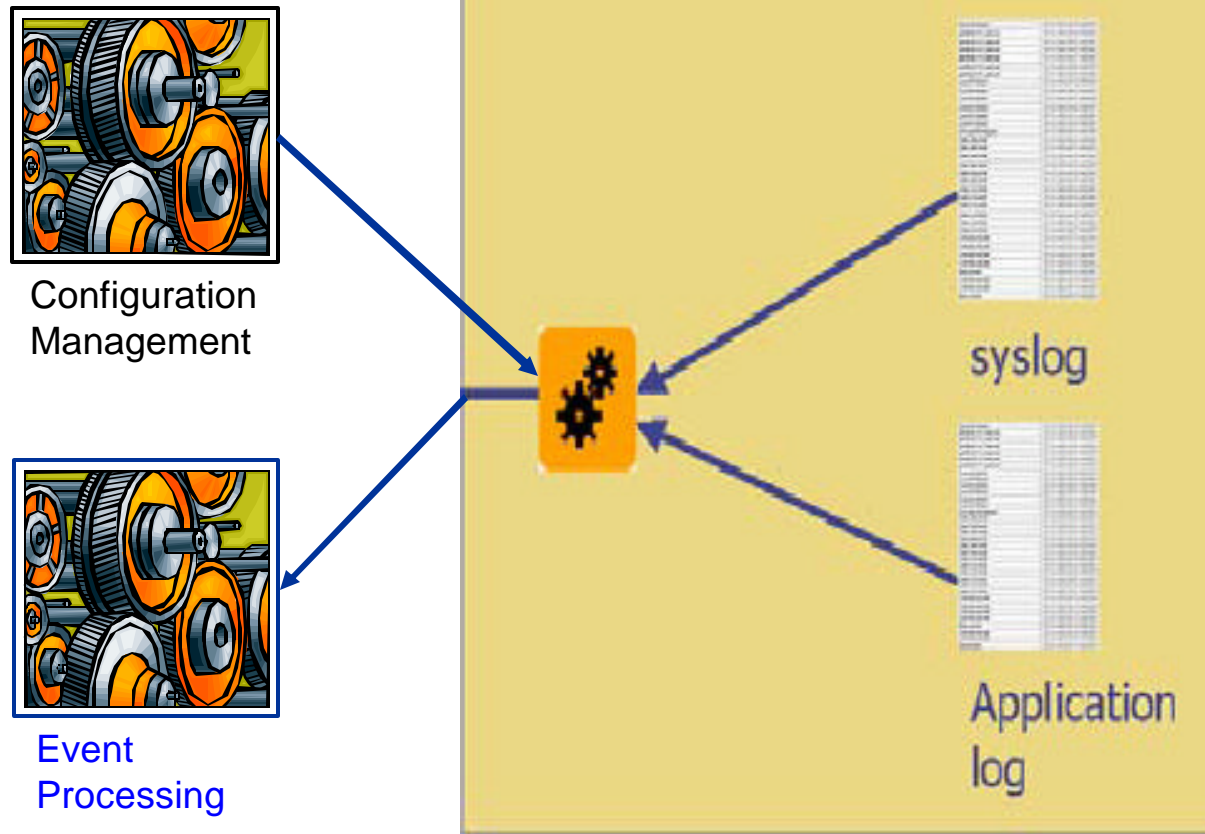
Tivoli Monitoring Architecture



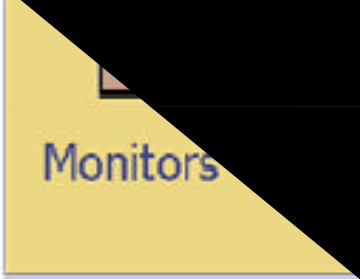
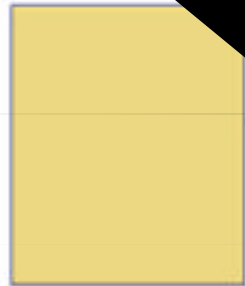


Pioneering New Horizons – Solutions that Evolve

Tivoli Log File Monitoring

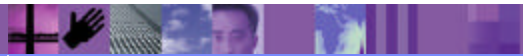


Applic



Monitors

Application



Pioneering New Horizons – Solutions that Evolve



Tivoli Custom Monitors

- Application log file filters
 - Define message types
 - Match log file messages to types
 - Map message fields to event fields
 - Filter unwanted events
- Custom monitoring probes
- Send events from scripts or programs



Tivoli Configuration Management

- Distribute monitors
- Set and examine thresholds
- Set and examine schedules
- Set and examine response actions
- Both command line and GUI access



Tivoli Event Processing

- Tivoli Enterprise Console (TEC)
- Display events
- Close events



Tivoli Event Display

- Windows or X-Windows versions
- Sort and select events
- Define views (event groups)
- Close events





Tivoli Event Display

The screenshot shows the Tivoli Event Display application window. At the top, there is a menu bar with 'Event', 'View', 'Task', 'Automated Tasks', and 'Help'. Below the menu bar, there is a toolbar with an 'Update ON' button and a 'Number of Messages' display showing '509 Entries'. A status bar at the top right shows counts for different event types: 0 Fatal, 2 Critical, 1 Minor, 2 Warning, 150 Harmless, and 0 Unknown. Below this, there are checkboxes for event types: FATAL, CRITICAL, MINOR, WARNING, HARMLESS, UNKNOWN, OPEN, ACK, and CLOSED. The main area is a table with the following columns: Sub_Source, Class, Hostname, Status, Message, and Date. The table contains several rows of events, with the first two rows highlighted in red (CRITICAL) and the rest in green (HARMLESS). At the bottom of the window, there are buttons for 'View Message...', 'View Action Status...', 'Acknowledge Message', 'Close Message', 'Select All', and 'Deselect All'.

Sub_Source	Class	Hostname	Status	Message	Date
SystemsNT	Host_Down	winscape	OPEN	Ping failed on winscape.	Jun 07 21:42:42
SystemsNT	nt_SysProTotCpuTime	ddsp	OPEN	= 99.9431, was 88.9401	Jun 11 12:31:11
Tivoli	universal_filesize	tw-2	OPEN	/var/local/Tivoli/tw-2/db/odb.log -c = 13342	Jun 11 11:16:12
Tivoli	OservRestarts	tw-2	OPEN	= 38, was 37	Jun 11 11:44:16
CSG	Tivoli_Down	courseinfo	OPEN	Since Jun 11, 2001 11:57	Jun 11 12:13:27
WebServices	Tivoli_Up	sweb	OPEN	Since Jun 11, 2001 12:04	Jun 11 12:04:07
WebServices	Tivoli_Up	storage	OPEN	Since Jun 11, 2001 12:04	Jun 11 12:04:07
WebServices	Tivoli_Up	oracle	OPEN	Since Jun 11, 2001 12:04	Jun 11 12:04:07
WebServices	Tivoli_Up	new-sweb	OPEN	Since Jun 11, 2001 12:00	Jun 11 12:00:09
WebServices	Tivoli_Up	new-campusagi	OPEN	Since Jun 11, 2001 12:00	Jun 11 12:00:10
WebServices	Tivoli_Up	hulk	OPEN	Since Jun 11, 2001 12:05	Jun 11 12:05:08
WebServices	Tivoli_Up	courseinfo	OPEN	Since Jun 11, 2001 12:05	Jun 11 12:05:12
WebServices	Tivoli_Up	cnr	OPEN	Since Jun 11, 2001 12:06	Jun 11 12:06:07
WebServices	Tivoli_Up	campusagi	OPEN	Since Jun 11, 2001 12:05	Jun 11 12:05:17



Tivoli Web Event Display

- View with any browser
- Automatically updated
- Summary page and drill-down
- Reads event repository database
- Sort detail page on any field





Tivoli Web Event Display – 1 of 2

TEC Console - Microsoft Internet Explorer

Address: http://www.tivoli.com/user-console.html

Tivoli event summary: Mon Jun 11 12:28:09 2001

Subtotals		CRITICAL	MINOR	WARNING	HARMLESS
All Alerts	1	1	2	150	
cfsmiscservers	8				8
clusters	36				36
esg	16			1	15
dns	18				18
irix	4				4
publicunix	2				2
systemsut	54	1			53
tivoli	6		1	1	4
webservices	10				10

Event Breakdown

This display updates every 5 minutes.

Count	Critical
1	Host_Down
Minor	
1	universal_file_size
Warning	
1	OservRestarts
1	Tivoli_Down
Harmless	
110	Tivoli_Up
36	Maintenance_Mode
2	Maestro_Inextday
1	PU_eventTimer
1	TEC_Start

Hosts down (updates every 180 seconds)

Severity	Hostname	Class	Last Event	Repeat
WARNING	coursinfo	Tivoli_Down	Jun 11, 2001 12:13	0
CRITICAL	winscape	Host_Down	Jun 07, 2001 21:42	0

Done | Unknown Zone (Mixed)



Tivoli Web Event Display – 2 of 2

TEC Console - Microsoft Internet Explorer
 Address: http://www-03.ibm.com/console.html

* For ALL systems as of Mon Jun 11 12:44:10 2001 [Back to Summary Page](#)

Severity	Group	Host	Event Class	Message	Date	Repeat
CRITICAL	DMS	iserver6	FU_status	= 413, was 9	Jun 11, 2001 12:40	0
CRITICAL	SystemNT	winscape	Host_Down	Ping failed on winscape.	Jun 07, 2001 21:42	0
CRITICAL	SystemNT	ddip	nt_SystemToCpuTime	= 94 6828, was 99 8431	Jun 11, 2001 12:41	0
WARNING	CSG	couranf6	Tivoli_Down	Since Jun 11, 2001 11:57	Jun 11, 2001 12:13	0
WARNING	Tivoli	tr-2	OverloadWarn	= 31, was 57	Jun 11, 2001 11:44	0
HARMLESS	CPSMacsStevens	maestro1ev	Maestro_JanitorJob	JanitorJob OK	Jun 11, 2001 07:29	0
HARMLESS	CPSMacsStevens	maestro1ev	Maestro_JanitorJob	JanitorJob OK	Jun 11, 2001 07:29	0

Hosts down (updates every 180 seconds)

Severity	Hostname	Class	Last Event	Repeat
WARNING	couranf6	Tivoli_Down	Jun 11, 2001 12:13	0
CRITICAL	winscape	Host_Down	Jun 07, 2001 21:42	0

Event Breakdown

This display updates every 5 minutes

Count	Critical
1	Host_Down
1	FU_status
1	nt_SystemToCpuTime
Minor	
1	universal_alarm
Warning	
1	OverloadWarn
1	Tivoli_Down
Harmless	
110	Tivoli_Up
36	MinorAlarm_Mode
2	Maestro_JanitorJob
1	FU_eventTimer
1	TEC_Suct



Monitoring WDI on z/OS

- Batch JOB Monitoring
- Performance Monitoring
- System Limits
- Special CICS Considerations





Monitoring WDI on AIX

- **WDI Process**
 - With Advanced Adapter
 - WDITrigger and WDIserver process
- **WDI Directories**
 - The archive directory
- **WDI Queues**
 - WDI.FAILURE.Q and WDI.PRTRFILE.Q
- **AIX Considerations**
- **Performance Monitoring**
- **System Limits**
- **AIX Backup**





Monitoring WDI on Windows

- WDI Process
 - wdiserver.exe and wditrigger.exe
- WDI Directories
 - The archive directory
- WDI Queues
 - WDI.FAILURE.Q and WDI.PRTFILE.Q
- Windows Considerations
- Performance Monitoring
- Windows Backup



Monitoring WebSphere MQ

- Overview
 - Can Monitor queues
 - Open tickets based upon a message in queue
 - Clear the queue
- Can Monitor the Queue Depth
- Not Smart enough to know the difference in spike verses broken





Summary

- Reviewed Tivoli Basics
 - Lots of Setup
- Reviewed Areas that could be Monitor for WDI
 - Varies by OS (z/OS, AIX and Windows)
 - Each scenario must be handled
- Reviewed Monitoring WMQ