

Key Benefits

- **Consolidation:** Deduplicate and consolidate the visibility of mainframe alerts from across your mainframe environment.
- **Insights:** Gain in-depth insights through alert correlation and historical data.
- **Speed:** Streamline workflows for faster problem identification, investigation, and resolution.
- **Integration:** Integrate alerts from WatchTower OPS/MVS®, NetMaster®, and SYSVIEW® core elements, as well as other solutions, through open APIs.
- **Collaboration:** Speed problem handover and escalation with improved collaboration between operators and subject matter experts.

Key Features

- **Contextual Insights:** WatchTower metrics from SYSVIEW and ML Insights are collected automatically at the moment of the alert. OPSLOG and QuickRef integration augment alerts with critical contextual insights.
- **In-context topology:** Allows impact analysis by showing interconnection between alerted resources and other z/OS components.

WatchTower Platform™ Alert Insights

Streamline workflows to accelerate incident identification, investigation, and resolution

Overview

The Broadcom® WatchTower Platform™ for mainframe AIOps enables mainframe alerts from different products across entire organizations to be centralized, consolidating meaningful insights about those alerts (including historical information and topology), and streamlining workflows to accelerate problem identification, investigation, and incident resolution.

Business Challenges

Today, managing alerts on the mainframe can be a disjointed and manual process requiring coordination across many applications and requiring many steps. Multiple problems can occur simultaneously which may or may not be causally linked. Issues can arise that are correlated, yet the inability to place alerts in the larger application and system context causes the dependencies to be obscured because of the complexity of the systems involved. Some alerts result from unusual circumstances that are not likely to be repeated, while other alerts are just the latest manifestation of a recurring issue.

In this frenetic mix of alerts, mainframe Level 1 operators are under tremendous pressure 24/7 to assess issues, check procedures, engage appropriate personnel, and perform troubleshooting. Lacking a sophisticated, informative view of alerts, they must start and log into disparate applications using different credentials across multiple platforms, without any retention of situational context from application to application. This tedious process of manually hunting for data requires expert knowledge even to fix simple issues. Escalations and handoffs can be slow and complex. This situation is untenable and unsustainable, and the complexity is only increasing in the IT ecosystem.

Solution Overview

Through WatchTower alert insights, Level 1 operators gain the ability to act swiftly and accurately by having all the details about an alert instantly visible to them. An operator can make a data-driven decision as to whether they have the correct skills to fix the problem or if they need to engage a subject matter expert (SME). If the problem is beyond their capabilities, WatchTower alert insights enable quick interaction between operators and SMEs to facilitate handover and escalation, including integration with main IT Service Management tools to support auto ticketing.

Centralized views provide the operator with a complete picture of the real-time alert catalog. This picture includes historical analysis, as well as integrated and easy-to-access OPSLOG log messages, and QuickRef information about a specific MSGID, all without the need to shift navigation through different products. Contextual views can cluster alerts and integrate with WatchTower topology capability to more easily understand how a CICS, Db2, or MQ alerted resource is connected with other

Key Features (cont.)

- **Single pane of glass for alerts:** The WatchTower alert insights view provides a customizable, centralized spot to visualize and quickly react to incoming alerts in real time.
- **Integrated historical alert insights:** The WatchTower alert insights details view enables views that span more than a standalone alert, integrating historical insights that match a set of criteria, with rapid problem report generation and handover.
- **Command interface:** Allows users quick interaction with alerts by enabling a command interface for initial problem troubleshooting.
- **Seamless alert management administration:** Define and administer roles and groups by establishing authorizations across teams and systems with customizable auto-ticketing to products such as ServiceNow.
- **Automated alert routing:** Easy-to-use, centralized system for managing alert automation rules, with actions based on alert parameters (MsgID, Resource, System, and so on) and associated actions such as auto-ticket creation.

z/OS components. Additionally, WatchTower alert insights include an alert configuration feature that can be tailored to manage the routing of common alerts.

Finally, if Level 1 operators, subject matter experts (SMEs), or both would like to issue commands to troubleshoot the alert problem, they can do it using a command interface without leaving alert insights context, with the benefit of keeping the history of the latest command issued, the outcome of the command, who issued the command, and the command date/time.

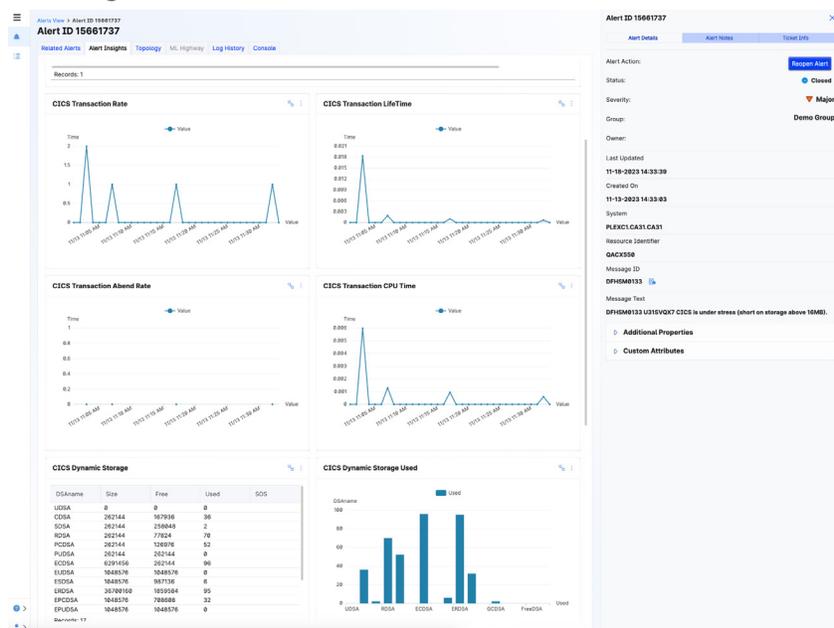
The following figure shows a WatchTower alert insights view with open alerts from multiple systems and resources, along with their severity and other basic information.

Alert Insights View

Alert ID	Last Updated	Resource	System	Message	Message Text	Severity	Status	Group	Counter	Actions
16239259	11-27-2023 12:29:09	CA11.DD80	PLEKCI.CA11	IDBS08G	DBO Requests - Number of times an application...	Minor	New	MOD-CHDR...	0	
16239273	11-27-2023 12:29:09	CA11.DD80.MSTR	PLEKCI.CA11	IDB0CPU1	Total CPU Time - Accumulated CPU time for the ...	Critical	New	MOD-CHDR...	0	
16239278	11-27-2023 12:29:08	CA11.DD80	PLEKCI.CA11	IDBS07G	Get Pages - Total number of GETPAGE requests...	Critical	New	MOD-CHDR...	0	
16239278	11-27-2023 12:29:08	MVS.SSHD7	PLEKCI.CA31	MVS_JOB_RE	Real storage	Minor	New	MOD-CHDR...	0	
16239287	11-27-2023 12:29:08	CA11.DD80.CA31	PLEKCI.CA31	CAAC0991	Heartbeat message	Info	New	ONES AM O...	163	
16239286	11-27-2023 12:29:08	CA11.DD80.BATH	PLEKCI.CA11	IDBCTN5	Number of transactions aggregated for the connec...	Major	New	MOD-CHDR...	0	
16239287	11-27-2023 12:29:07	CA11.DD80.ALL	PLEKCI.CA11	IDBCTN8	DB2 Services Wait Time - Thread elapsed time in...	Critical	New	MOD-CHDR...	0	
16239276	11-27-2023 12:29:07	CA11.DD80.LITLL	PLEKCI.CA11	IDBCTN9	Number of transactions aggregated for the connec...	Critical	New	MOD-CHDR...	0	
16239276	11-27-2023 12:29:06	CA32.DD30.BRLM	PLEKCI.CA32	IDB0S8T	Nonrepresentable SIB CP Time - Accumulated non...	Minor	New	MOD-CHDR...	0	
16239274	11-27-2023 12:28:18	MVS.GATKE81	PLEKCI.CA31	MVS_JOB_RE	Real storage	Critical	New	MOD-CHDR...	0	
16239213	11-27-2023 12:28:17	CA11.DD80.BP8K1	PLEKCI.CA11	IDB8PRTM	Page Residency Time - Average time, in seconds...	Minor	New	MOD-CHDR...	0	
16239212	11-27-2023 12:28:17	CA11.DD80.BP8K1	PLEKCI.CA11	IDB8WRTI	Write I/O - Number of write I/O operations. EPCL...	Critical	New	MOD-CHDR...	0	
16239211	11-27-2023 12:28:17	CA11.DD80.BP8K1	PLEKCI.CA11	IDB8D50	Datasets Opened - Number of data sets physical...	Critical	New	MOD-CHDR...	0	
16239278	11-27-2023 12:28:16	CA11.DD80.BP8K1	PLEKCI.CA11	IDB8HTR	Bufferpool Hit Ratio. ZPCED 2. SQL calculated value...	Minor	New	MOD-CHDR...	0	
16239269	11-27-2023 12:28:16	CA11.DD80.BP8K1	PLEKCI.CA11	IDB8PWR	Page Writes - Number of updated BP pages writt...	Critical	New	MOD-CHDR...	0	
16239268	11-27-2023 12:28:15	CA11.DD80.BP8K1	PLEKCI.CA11	IDB8READ	Read I/O - Number of read I/O operations (synch...	Minor	New	MOD-CHDR...	0	
16239267	11-27-2023 12:28:15	CA11.DD80.BP8K1	PLEKCI.CA11	IDB8OTG	Get Pages - Number of GETPAGE requests. EPCL...	Critical	New	MOD-CHDR...	0	
16239265	11-27-2023 12:28:14	MVS.KOUJAV1	PLEKCI.CA11	MVS_JOB_CP	CP CPU usage percentage total	Minor	New	MOD-CHDR...	0	
16239264	11-27-2023 12:28:13	MVS.GQAC1C33	PLEKCI.CA31	MVS_JOB_PA	Paging rate	Minor	New	MOD-CHDR...	0	
16239263	11-27-2023 12:28:12	CA11.DD80.BP1	PLEKCI.CA11	IDB8READ	Read I/O - Number of read I/O operations (synch...	Major	New	MOD-CHDR...	0	
16239262	11-27-2023 12:28:12	CA11.DD80.BP1	PLEKCI.CA11	IDB8PWR	Page Writes - Number of updated BP pages writt...	Major	New	MOD-CHDR...	0	
16239261	11-27-2023 12:28:11	CA11.DD80.BP1	PLEKCI.CA11	IDB8PRTM	Page Residency Time - Average time, in seconds...	Major	New	MOD-CHDR...	0	
16239260	11-27-2023 12:28:11	CA11.DD80.BP1	PLEKCI.CA11	IDB8D50	Datasets Opened - Number of data sets physical...	Critical	New	MOD-CHDR...	0	
16239199	11-27-2023 12:28:10	CA11.DD80	PLEKCI.CA11	IDB8CRT	Threads Created - Number of successful CREATE...	Minor	New	MOD-CHDR...	0	
16239198	11-27-2023 12:28:05	MVS.DDZDD8M1	PLEKCI.CA31	MVS_JOB_CP	CP CPU usage percentage total	Critical	New	MOD-CHDR...	0	

The following figure shows an example of the details provided by WatchTower alert insights, including a timeline of when the same alert occurred previously, as well as data about related alerts.

Alert Insights Timeline



Critical Differentiators

WatchTower alert insights help optimize mainframe operations in numerous ways. For example, it enables operators to perform the following tasks:

- **Increase visibility through a single pane of glass:** Suppose a major financial institution has 100 logical partitions (LPARs). Previously, the operator had no way to consolidate alerts from these resources. With WatchTower alert insights, alerts from across the enterprise, including all 100 LPARs and more, are consolidated in one place.
- **Gain Contextual Insights on fly:** WatchTower alert insights provide out-of-the-box contextual information around alerts. It can go from performance metrics until machine learning insights. All collected automatically at the moment of the alert, saving time during initial problem troubleshooting.
- **Create and manage incidents through ticketing:** With the ability to interact with products such as ServiceNow, WatchTower alert insights facilitates ticketing and lets operators set security on the resource level so that the correct people can be assigned to address an issue as swiftly as possible.
- **Improve responses through an overarching view:** By looking at the historical and topological detail that WatchTower alert insights provides about alerts, an operator might see that the same resource is issuing other alerts or that multiple resources are issuing the same type of alert. These alert patterns indicate that there is a larger problem to be addressed.
- **Identify areas for continuous improvement:** If an operator sees the same problem happening a dozen times over the past seven days, they can flag this as an area that needs a permanent fix or an automated response. You can optimize the mainframe operations and the business processes the mainframe supports.

Next Steps

The WatchTower alert insights capability is included in the **WatchTower Platform Suite**.

For more information, visit our site at:
mainframe.broadcom.com/WatchTower.