

Facilitate Proactive Cyber Asset Patching

AssurX Patch Management helps the Energy & Utility industry manage critical infrastructure protection as part of a defense in depth strategy. It proactively guides the collection, analysis and policy-based delivery of patches to a diverse range of endpoints across classified information technology (IT) and operational technology (OT) assets. Patch Management is the centralized point of truth required for today's converged environments.



A SINGLE SOLUTION FOR PATCHING COMPLIANCE

The AssurX Patch Management solution solves the security challenge of managing cyber asset patching across IT, OT and IoT infrastructures for effective risk mitigation and NERC CIP-007 compliance with BES Cyber System Security. Patch Management can be integrated with the AssurX Energy and Utilities Management solution to further improve compliance posture by enabling entities to provide evidence of patching for critical infrastructure and Industrial Control Systems (ICS).

AssurX Patch Management increases your control of technology system cybersecurity across the entity. It facilitates the centralized management of enterprise cyber assets including Electronic Access Control or Monitoring Systems (EACMS), Physical Access Control Systems (PACS) and Protected Cyber Assets (PCA) from assessment and deployment, through tracking software and firmware patching and reporting.

Patch Management enables IT and OT technology managers to create a single, unified patching process aligned with reliability standards. The result is a practice that engages all necessary people in a collaborative, proactive cyber asset patching system driven by a controlled set of workflows.

PATCH MANAGEMENT SUBPROCESSES

Tracking: Begin with an asset repository for any asset that has software or firmware, any kind of intelligence or any internet connectivity. The asset list can be created in AssurX or imported from an external system. One system allows an organization to classify risk levels for all assets, enabling efficient patching based on severity.

Evaluation: Maintain asset baseline including information on software, firmware, patches, and any desired asset properties. For each patch cycle or as needed, assign patch source review tasks for known software/firmware or seamlessly integrate with a patch discovery service.

Mitigation: Records the Responsible Entity's plans and actions to mitigate the vulnerabilities addressed by each security patch and a time frame to complete the mitigations.

DASHBOARDS

The Patch Management Dashboard is the main information center for the Patch Management system. View up-to-date status, access relevant data, demonstrate compliance and ensure nothing is overlooked. Dashboard features allow users to drill down to view patch system records, assets, installed software, patch source review and patch installation tasks.

Dashboards and metrics provide full visibility into the state of IT/OT cyber asset patching and where immediate action may be required for effective risk mitigation and minimizing cyber threats. Filters provide the ability to quickly find desired records. Clicking a link displays the properties of each type of record.

BENEFITS OF THE ASSURX PATCH MANAGEMENT SOLUTION:

- + Minimize security risk and performance issues by controlling the patching process.
- + Maintain a true asset inventory and insights into your network's state of security.
- + Bridge the gap between IT/OT patching with a harmonized approach.
- + Provide thorough evidentiary collection for compliance validation.
- + Achieve greater ROI from your existing security solutions.
- + Ensure vigilance for proprietary or ad-hoc assets that are not accounted for in the IT/OT management framework.

Patch Source Review Dashboard Display

PSR ID	Software ID	Software Type	Software Name	Software Version	Vendor Name/Manufacturer	Ad-Hoc PSR	Patch Cycle Label	Review Source	Security Patch Discovered?	Dept	Assignee	Due Date	Status
4	1264	Application	Firefox 44.0.2	44.0.2	Mozilla	No		FoxGuard	Pending	AssurX	Dave Jones	04/25/2018	Due > 2 weeks
5	1265	Application	Internet Explorer11	11.504.15063.0	Microsoft Corporation	No		AssurX	Pending	AssurX	Dave Jones	04/25/2018	Due > 2 weeks
6	1266	Firmware	SEL-387-0	R011	Schweitzer Engineering Laboratories, Inc. (SEL)	No		External	Pending	AssurX	Dave Jones	04/25/2018	Due > 2 weeks

Patch Installation Task Dashboard Display

Task ID	Asset ID	Software ID	Patch ID	Asset Name	Software Name	Patch Filename	Patch Description	Dept	Assignee	Due	Status
7	799	1264	1729	GO_CROSSBOW_SRV_2	Firefox 44.0.2	57.0.2-64	Mozilla - Firefox - 57.0.2.64-bit	AssurX	Dave Jones	4/9/2018	Closed
8	799	1264	1732	GO_CROSSBOW_SRV_2	Firefox 44.0.2	57.0.4-64	Mozilla - Firefox - 57.0.4.64-bit	AssurX	Dave Jones	4/10/2018	Closed
9	799	1264	1731	GO_CROSSBOW_SRV_2	Firefox 44.0.2	57.0.3-64	Mozilla - Firefox - 57.0.3.64-bit	AssurX	Dave Jones	4/24/2018	Due within 2 weeks
11	799	1264	1733	GO_CROSSBOW_SRV_2	Firefox 44.0.2	57.0.4-64	Mozilla - Firefox - 57.0.4.64-bit	AssurX	Dave Jones	4/24/2018	Due within 2 weeks
12	799	1264	1733	GO_CROSSBOW_SRV_2	Firefox 44.0.2	57.0.4-64	Mozilla - Firefox - 57.0.4.64-bit	AssurX	Dave Jones	4/24/2018	Due within 2 weeks
10	799	1264	1732	GO_CROSSBOW_SRV_2	Firefox 44.0.2	57.0.4-64	Mozilla - Firefox - 57.0.4.64-bit	AssurX	Dave Jones	4/27/2018	Due > 2 weeks

REPORTING

Reporting features for internal and external audits can be configured to show current and historical states of an asset or software, an environment (IT/OT) and overdue and pending tasks. Reports are easily configurable based on the information your organization requires and downloadable for auditors and management review.

Sample Software Record

Asset Name: GO_CROSSBOW_SRV_2 **Record Status:** Open

Asset Type: Application Server **Review Date:** 3/1/2020

Location: MFC/ASSET Location1 **Production Status:** Production

Environment: U Use - PROD

Asset ID: 22

Assignment Dept: AssurX

Assignment User: MDL_Admin

Asset Details: Patch Installation Resource Dept: AssurX Patch Installation Resource: MDL_Admin

ADDITIONAL ASSET DETAILS

System Function:	Open Application Server	Asset Type:	Other: NA	Manufacturer:	AssurX
Model:	Model1	Serial Number:	9513	Asset Tag Number:	AssetID
Building/Floor/Room:	Big_Place_House_13	Customer/Account:	Big_Place_House_13	Spoken Logging Checked:	Yes
Building Category:		Target Production Date:	1/3/2021	IS Service Date:	1/3/2021
Reference Data:	Last Annual Certification Date: 1/3/2021	Virtual Instance?	Yes	Part Number:	
Virtual Host Name:		Parent ID:	Parent NA	Part Number:	
Parent ID:	Parent NA				

ADDITIONAL LOCATION INFO: AssurX Patch Management Control Center

NETWORK LOCATION DETAILS

Network Zone:	ESP	Endpoint Security:	AssurX_ESP1	Physical Security:	AssurX_PSP1
Asset ID:	22	Parent ID:	22	Parent ID:	22

ASSOCIATIONS

Related Software

Instance Software ID	Software ID	Software Type	Software Name	Software Version	Vendor Name	Release Date
1	22	Application	AssurX Patch Manager 11.0.0.44	11.0.0.44	AssurX	2019
2	22	Application	Python	3.6.1	Python	2019
3	22	Application	Microsoft Windows	10.0.18362.1	Microsoft	2019
4	22	Application	Microsoft Office Access 14.0.7015.1000	14.0.7015.1000	Microsoft Corporation	2019
5	22	OS	Microsoft Windows Server 2008 R2 Enterprise 6.1.7601 Service Pack 1 Build 7601	6.1.7601	Microsoft	2019

INTEGRATION

Patch Management is available either as a separate product, or it can be seamlessly integrated with the AssurX Energy and Utilities management platform. Integration is available for existing security solutions that provide asset and patch information and services.

Quality Management and Regulatory Compliance Systems: Patch Management integrates with the AssurX platform or other vendor solutions to further support enterprise cybersecurity strategies. These connected processes create an ecosystem of awareness and compliance and can include corrective actions/mitigation plans, change management, document management, training management, and others.

Discovery and Monitoring Services: Integrate with a discovery service of preference. Asset records and documentation can be imported with AssurX spreadsheet import or if required, a custom integration. Integrate with other monitoring services to gain a complete view of vulnerability and risk exposure across your organization.

Sample Patch Installation Task Record

PATCH INSTALLATION TASK DETAILS

Status: Open

Installation Comments:

Assignment Dept: AssurX

Assignment User: MDL_Admin

ASSET SOFTWARE/PATCH DETAILS

Asset ID	Asset Name	Asset Type	Location	Production Status	Environment
22	GO_CROSSBOW_SRV_2	Application Server	PATCH-ASSET Location1	Production	PROD

Software ID: 22 **Software ID:** 31 **Patch ID:** 25

Software ID	Software Type	Software Name	Software Version	Vendor Name	Model Number	Serial Number	Part Number
31	Application	Microsoft Office Access 14.07015.1000	14.0.7015.1000	Microsoft Corporation			

Patch ID: 25 **Patch File Name:** kb2428772016a8315121-fullfile-x86-glb.exe **Patch Description:** KB3115121 - Security Update for Microsoft Office - 5/9/2016 8:00:00 PM **Patch Vendor Name:** Microsoft Corporation **Patch Severity:** Critical **Patch Status:** Approved

RECORD HISTORY

Creation Date:	3/14/2019	Creation User:	recordsmanager
Date Completed:			
Date Closed:			
Last Edit Date:	3/14/2019	Last Edit User:	recordsmanager
Reason For Edit:	New record		

Parent Information

Asset ID: 22

Automatic Patch Installation Software: AssurX Patch Management can be customized to integrate with patch installation software to facilitate patch deployment and installation. All deployment data becomes part of the master AssurX asset record.

ABOUT ASSURX

With decades of expertise built into our quality management and regulatory compliance software platform, AssurX helps companies maintain quality and compliance, streamline workflow, control risks and better manage any enterprise.

Our incredibly configurable software and deep understanding of users' needs produce a unique system that easily adapts as your business evolves. AssurX is an ideal partner for regulated companies looking for better operational control and efficiency while staying compliant.

To learn more about how AssurX can help with your quality and regulatory compliance management needs, please call 1-888-9-ASSURX.

PATCH MANAGEMENT FEATURES

- + Compliant electronic signature approvals for any step within the patch cycle
- + Alerts and notifications to keep tasks on schedule
- + Powerful monitoring and reporting engine that provides deep insight into patch status and overall security posture
- + Drag-and-drop, configurable forms for all tasks including Patch Source Review (PSR), patch installation and mitigation
- + Configurable permission and access controls
- + Asset Repository and baseline tracking
- + Extensible for unlimited workflows
- + Easily adaptable to changes in the environment, workflows, and other organizational requirements
- + Customizable for unique workflows