

Microsoft Creates a More Secure Operating System Environment

Microsoft raising minimum DCOM Authentication Level

Microsoft change in minimum DCOM Authentication Level affects many Rockwell Automation software products in distributed systems

Please review [Rockwell Automation Product Notice PN-1581](#) to learn about **directly** and **indirectly** affected products

- Microsoft delivering DCOM patch in three phases Jun2021, Jun2022, Mar2023
- Deploying Microsoft's June 2022 or March 2023 cumulative update prevents Rockwell Automation products from establishing DCOM connections; **systems will no longer function properly**
 - Products using FT Services or FT LiveData are affected
 - Products with OPC DA communications between computers are affected
 - Products using Windows DCOM APIs to establish connections are affected

Microsoft is addressing a vulnerability ([CVE-2021-26414](#)) as described in Microsoft [KB 5004442](#)

Microsoft's DCOM Hardening change effect is industry wide
Any application attempting to establish DCOM connection not using the new minimum authentication level will experience failures

How Rockwell Products Are Affected?

Products can be directly or indirectly affected by Microsoft DCOM Hardening patch

- Directly affected product

- Use Windows API to make DCOM connection
- Use Classic OPC DA either as server or client

- Examples

- FactoryTalk Services Platform – uses DCOM
- FactoryTalk Edge Gateway – uses Classic OPC DA

- Indirectly affected product

- Use FactoryTalk Directory or FactoryTalk Security
- Use FactoryTalk LiveData

- Examples

- Studio 5000 Logix Designer – uses FactoryTalk Security
- FactoryTalk Analytics DataView – uses FactoryTalk LiveData

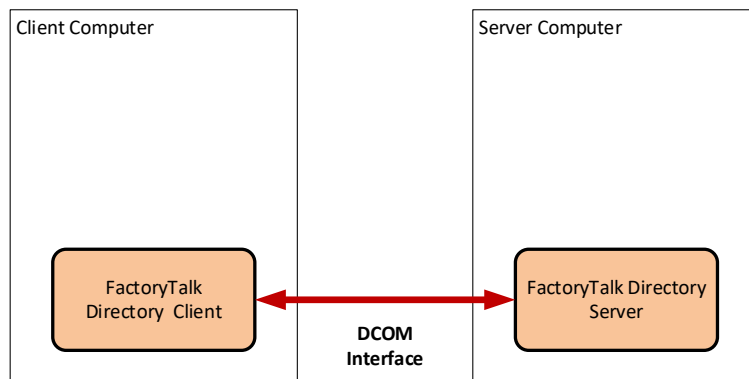
- Unaffected product

- Server and client are installed on a single computer

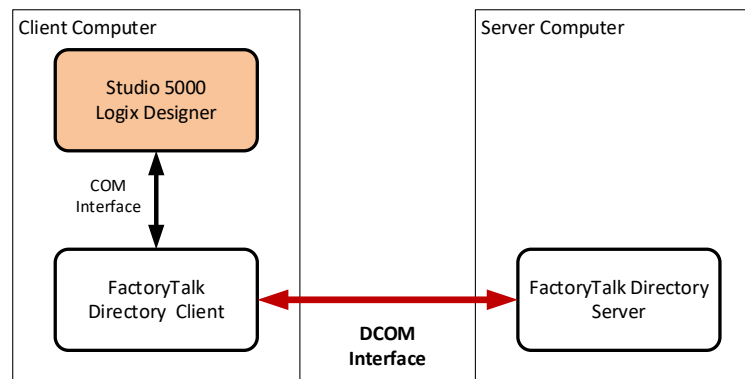
- Examples

- FactoryTalk View Site Edition on a single computer

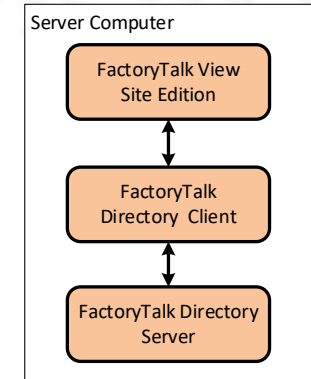
FactoryTalk Directory is **directly affected** by Microsoft DCOM Hardening patch



Studio 5000 Logix Designer is **indirectly affected** by Microsoft DCOM Hardening patch



FactoryTalk View Site Edition is **unaffected**



Affected Rockwell Automation Products (MS CVE-2021-26414)

Critical Microsoft patch to be released June 2022

• Products directly affected

- FT Services Platform
- FT Linx
- RS Linx Classic
- FT Linx Gateway
- FT Linx Data Bridge
- FT View SE
- FTViewpoint
- FT Batch
- FT Transaction Manager
- FT Edge Gateway
- FT Analytics EdgeML
- FT VantagePoint
- FT ProductionCentre
- Pavilion8
- ThinManager
- Emonitor
- FT EnergyMetrics
- KEPServer Enterprise

• Products indirectly or **unaffected**

- FT Activation Manager
- FT Updater
- Connected Component Workbench
- PlantPAX MPC
- PlantPAX Process Object Online ConfigurationTool
- FT Policy Manger
- FT System Services
- FT Linx Comm DTM
- ControlFlash
- ControlFlash Plus
- Studio 5000 Logix Designer
- Studio 5000 View Designer
- Studio 5000 Add On Profiles
- Studio 5000 Architect
- Application Code Manger
- Studio 5000 Logix Emulate
- FT Logix Echo
- FT View ME Station
- FT Historian SE
- FT Historian ME
- FT AssetCentre
- RS Logix 5
- RS Logix 500
- RSLogix 5000
- RS Networx
- FT Metrics
- FT Production Management
- FT Quality Management
- FT Warehouse Management
- FT EI Hub
- FT PharmaSuite
- FT CPGSuite
- FT AutoSuite
- FT Analytics DataView
- FT Analytics DataFlowML
- FT Analytics Augmented Modeler
- Historian-ThingWorx connector
- AADvance OPC Portal
- AADvance OPC Standalone
- Trusted OPC Portal
- KepServer Enterprise

[Official product list can be found in Product Notice, 2022-01-001\(PN1581\)](#)

What Does The Affect Look Like?

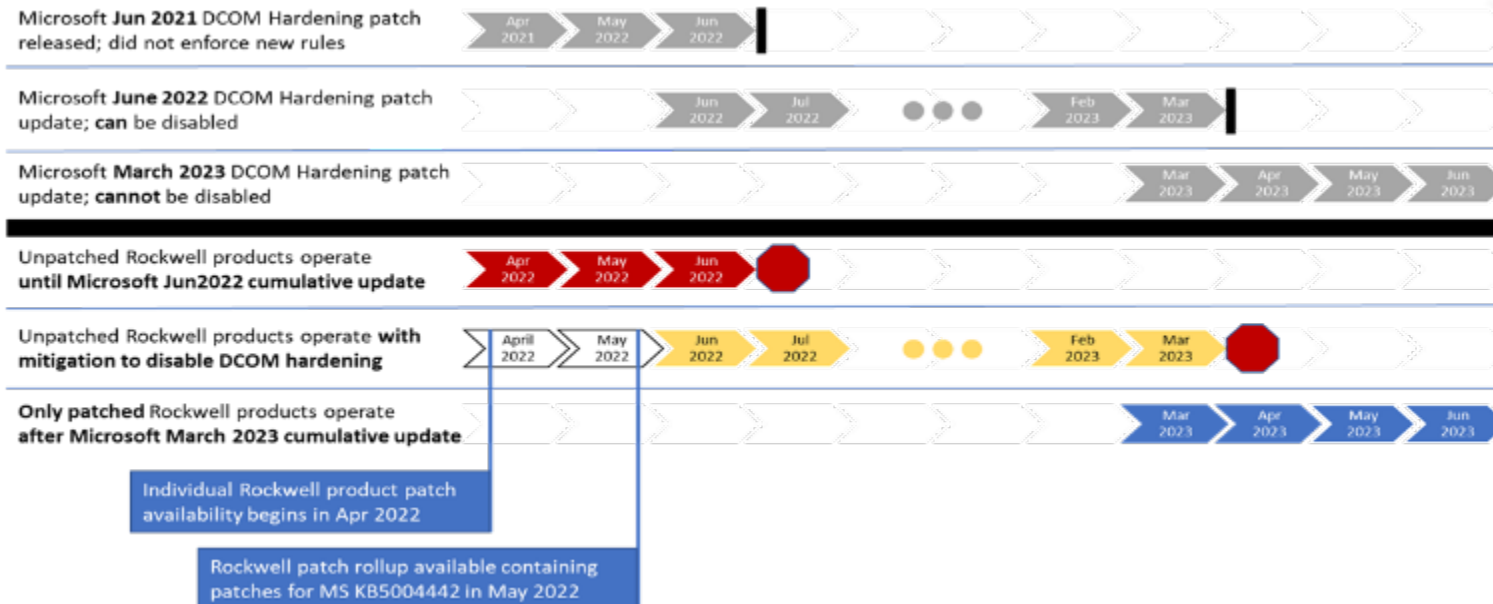
Symptoms Resulting from Microsoft DCOM Hardening

| | Directly Affected | Indirectly Affected |
|--------------------------------------|--|--|
| FactoryTalk Services Platform | <ul style="list-style-type: none">• Cannot edit FTDirectory• Diagnostic message transmission• FTDirectory changes not propagating to clients | <ul style="list-style-type: none">• Authentication failure• Authorization failure |
| FactoryTalk LiveData | <ul style="list-style-type: none">• Remote Client and Server cannot connect | <ul style="list-style-type: none">• Tag browse/ read/ write failures |
| Classic OPC DA | <ul style="list-style-type: none">• Remote Client and Server cannot connect | <ul style="list-style-type: none">• Tag browse/ read/ write failures |

Unpatched directly affected products prevent the system from operating properly

Rockwell Automation's Response

- Products released March 2022 (V34-aligned products), and thereafter, will not be affected by Microsoft's DCOM Hardening patch (MS KB5004442)
- Preferred and Managed versions of directly affected products will be patched
Please refer to [Rockwell Automation Product Notice PN-1581](#) for details
- Patch timeline (Directly affected Rockwell Automation products)



Upcoming Rockwell Automation product releases and patches raise our products' DCOM authentication level to meet Microsoft's new minimum

What patches will Rockwell Automation produce?

Preferred and Managed versions of directly affected products will be patched

| Affected Product | Versions |
|--|--|
| FactoryTalk® Services | 6.21, 6.20, 6.11, 6.10, 3.00, 2.90 |
| FactoryTalk® Linx | 6.21, 6.20, 6.11, 6.10, 6.00, 5.90 |
| FactoryTalk® Linx Gateway | 6.21, 6.20, 6.11, 6.10, 6.00, 3.90 |
| FactoryTalk® Linx Data Bridge | 6.21.01, 6.20, 6.11 |
| RSLinx® Classic | 4.21, 4.20, 4.12, 4.11, 4.10, 4.00.01 |
| FactoryTalk® View Site Edition | 12.00, 11.00, 10.00, 9.00 |
| FactoryTalk® ViewPoint | 12.00, 11.00, 10.00, 9.00 |
| FactoryTalk® Batch | 14.00, 13.00.02 |
| ThinManager® | 12.01, 12.00, 11.02, **11.01, **11.00, **10.00 |
| FactoryTalk® Transaction Manager | 13.10, 13.00, 12.10, 12.00 |
| ** Emonitor® Condition Monitoring Software | 4.00 |
| ** FactoryTalk® ProductionCentre® | 10.04, 10.03, 10.02, 10.01 |
| ** FactoryTalk® VantagePoint® | 8.31, 8.30, 8.20, 8.10, 8.00, 7.00 |
| ** FactoryTalk® Edge Gateway™ | 1.02, 1.01.01, 1.01.00, 1.00 |
| ** Pavilion 8® | 5.17.01, 5.17.00, 5.16, 5.15.01, 5.15 |
| ** FactoryTalk® EnergyMetrics™ | 2.30 |

** Products do not participate in Rockwell Automation monthly patch rollout

Products released March 2022 (V34-aligned products), and thereafter, will not be affected by Microsoft's DCOM Hardening patch (MS KB5004442)

Individual product patches are planned to be available before Microsoft's June 2022 cumulative Windows update

When will Rockwell Automation patches be available?

Preferred and Managed versions of directly affected products will be patched

| Affected Product | Versions | Individual Patches | Targeted Rollup |
|--|---------------------------------------|---------------------|-----------------|
| FactoryTalk® Services | 6.21, 6.20, 6.11, 6.10, 3.00, 2.90 | Available by Apr 1 | May 2022 |
| FactoryTalk® Linx | 6.21, 6.20, 6.11, 6.10, 6.00, 5.90 | Available by Apr 1 | May 2022 |
| FactoryTalk® Linx Gateway | 6.21, 6.20, 6.11, 6.10, 6.00, 3.90 | Available by Apr 1 | May 2022 |
| FactoryTalk® Linx Data Bridge | 6.21.01, 6.20, 6.11 | Available by Apr 1 | May 2022 |
| RSLinx® Classic | 4.21, 4.20, 4.12, 4.11, 4.10, 4.00.01 | Available by Apr 1 | May 2022 |
| FactoryTalk® View Site Edition | 12.00, 11.00, 10.00, 9.00 | Available by Apr15 | May 2022 |
| FactoryTalk® ViewPoint | 12.00, 11.00, 10.00, 9.00 | Available by Apr 15 | May 2022 |
| FactoryTalk® Batch | 14.00, 13.00.02 | <i>tbd</i> | <i>tbd</i> |
| FactoryTalk® Transaction Manager | 13.10, 13.00, 12.10, 12.00 | Available by Apr 22 | May 2022 |
| ThinManager® | 12.01, 12.00, 11.02 | Available by Apr 1 | May 2022 |
| ** ThinManager® | 11.01, 11.00, 10.00 | Available by Jun 1 | |
| ** FactoryTalk® ProductionCentre® | 10.04, 10.03, 10.02, 10.01 | Available by Apr 1 | |
| ** FactoryTalk® VantagePoint® | 8.31, 8.30, 8.20, 8.10, 8.00, 7.00 | Available by Apr 22 | |
| ** Emonitor® Condition Monitoring Software | 4.00 | <i>tbd</i> | |
| ** FactoryTalk® Edge Gateway™ | 1.02, 1.01.01, 1.01.00, 1.00 | <i>tbd</i> | |
| ** Pavilion 8® | 5.17.01, 5.17.00, 5.16, 5.15.01, 5.15 | <i>tbd</i> | |
| ** FactoryTalk® EnergyMetrics™ | 2.30 | Fall 2022 | |

** Products do not participate in Rockwell Automation monthly patch rollup

Individual product patches are planned to be available before Microsoft's June 2022 cumulative Windows update

Rockwell Automation monthly patch rollups beginning in May 2022 will incorporate product patches, as they become available

Official product list can be found in Product Notice, [2022-01-001 \(PN1581\)](#)

Critical Knowbase Articles

Communicating what we know and what we are doing in response

For more detail about Rockwell Automation's response, refer to Rockwell knowledgebase article [IN39461](#)

- [PN1581 - Product Notification 2022-01-001 - Rockwell Automation products unable to establish proper DCOM connection after installing Microsoft DCOM Hardening patch \(MS KB5004442\)](#)
- [IN39470 - Mitigating Microsoft DCOM Hardening Patch \(MS CVE-2021-26414\) for Affected Rockwell Automation Product](#)
- [IN39475 - Frequently Asked Questions related to Rockwell Automation's Response to Microsoft DCOM Hardening \(CVE-2021-26414\)](#)
- [IN39471 - Rockwell Automation Product Patches for Microsoft DCOM Hardening \(CVE-2021-26414\) TOC](#)

All articles related to DCOM Hardening are referenced and linked from IN39461

Recommend Action to Ensure Continued System Operation

Microsoft raising minimum DCOM Authentication Level

| Microsoft Release Date | Microsoft Rollout Phase | Recommended Action |
|-----------------------------|--|--|
| June 2021 | <ul style="list-style-type: none"> Windows DCOM security updates are implemented but are disabled by default | <ul style="list-style-type: none"> No action necessary |
| June 2022 March 8, 2022 | <ul style="list-style-type: none"> Windows DCOM security updates are enabled by default A Microsoft registry key can disable these Microsoft changes | <p>Take one or more of the following actions:</p> <ul style="list-style-type: none"> Disable the Microsoft DCOM security updates as described in Microsoft KB5004442 Move OPC DA clients and servers to the same workstation Install Rockwell Automation patches for all directly affected products; or update all Rockwell Automation directly affected products to the most current version Indirectly affected product users must install Rockwell Automation patches for the directly affected product upon which they are dependent, typically FactoryTalk Services and RSLinx Classic; or update all Rockwell Automation indirectly affected products to the most current version <i>released after February 2022</i> |
| March 2023 June 14, 2022 | <ul style="list-style-type: none"> Windows DCOM security updates are enabled by default Microsoft DCOM changes can no longer be disabled | <ul style="list-style-type: none"> Install Rockwell Automation patches for all directly affected products; or update all Rockwell Automation directly affected products to the most current version Indirectly affected product users must install Rockwell Automation patches for the directly affected product upon which they are dependent, typically FactoryTalk Services and RSLinx Classic; or update all Rockwell Automation indirectly affected products to the most current version <i>released after February 2022</i> |

IMPORTANT!

Systems mixing new or patched product versions with unpatched directly affected product versions will experience DCOM-related failures

For more information on Rockwell's response, please refer to Rockwell's Table of Content knowledgebase article [IN39461](#)