



ACCELERATING  
INNOVATION

# **[5-1703] Streamlining Cybersecurity: Air Liquide and DeltaV Integrated Patch Management**

## **Disclaimer**

The information and/or opinions expressed in this presentation are those of the authors and do not necessarily represent official policy or permission of Emerson or Emerson Exchange.

## **Important Reminders**

Photography and audio/video recording is not permitted in any session, or in the exhibition areas, without press credentials or written permission from Emerson or Emerson Exchange.

Inquiries should be directed to:  
**[EmersonExchange@Emerson.com](mailto:EmersonExchange@Emerson.com)**



**Fowad Siddiqui**

Industrial Controls / Operation Technology Engineer / Air Liquide



**Matthew Kane**

Lifecycle Services Program Manager / Emerson



**David Hemphill**

Account Manager / Puffer Sweiven



# Agenda

**Fowad Siddiqui**

**Fowad Siddiqui**

**Matt Kane**

**Fowad Siddiqui /  
David Hemphill**

**Matt Kane**

**Air Liquide Industrial Model**

**Patching Evolution at Air Liquide**

**Integrated Patch Management Overview**

**Integrated Patch Management at Air Liquide**

**Integrated Patch Management Product Enhancements**



# Air Liquide Industrial Model

# A collective energy to serve our 4 million clients and patients



**66,300**

employees in 60 countries

committed on a daily basis to better listen to and serve our customers and patients

**3,900**

employees

dedicated to innovation

**2+ M**

industrial customers all over the world

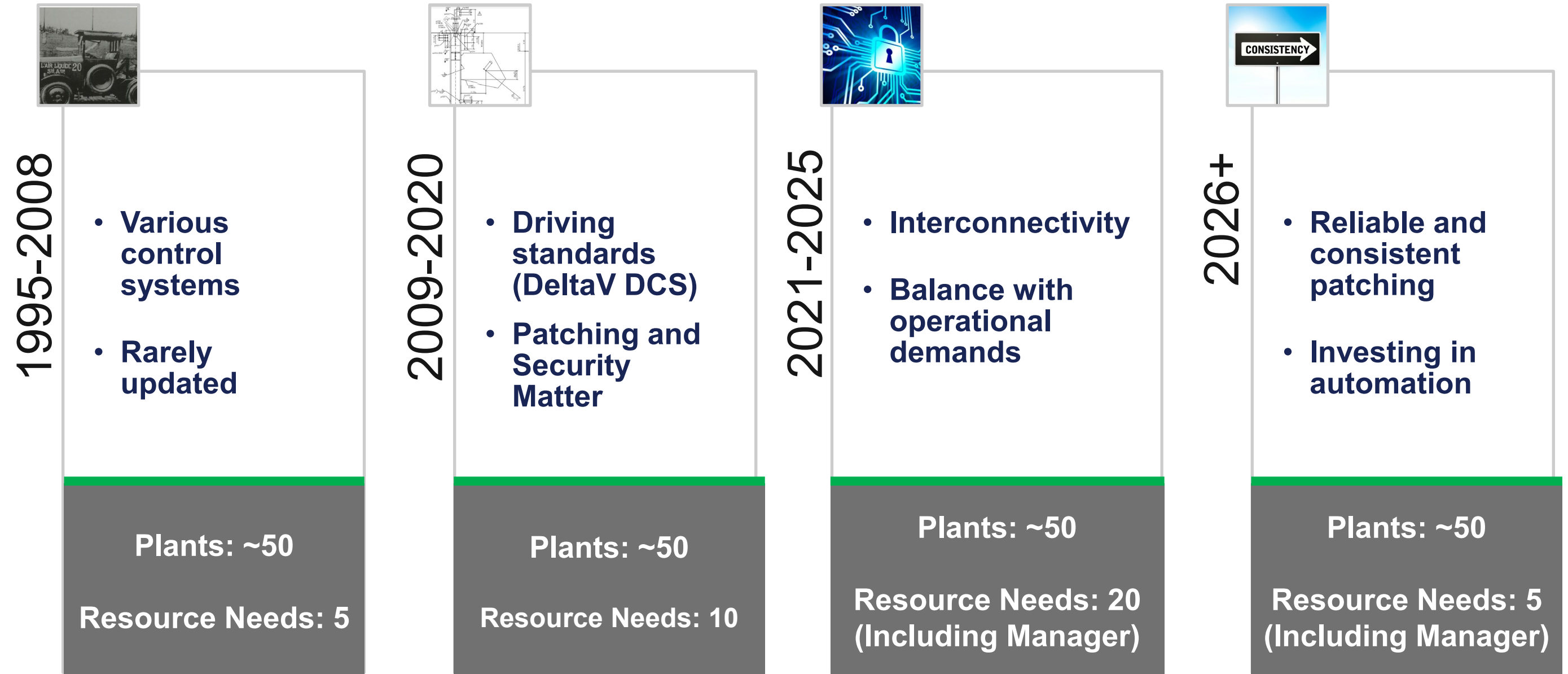
Craftsmen, SMEs, ETIs, multinationals from sectors as varied as steel, energy, chemicals, car manufacturing, aeronautics, food processing or the pharmaceutical industry...

**2 M**

patients supported at home

# Patching Journey & Challenges

# Air Liquide Patching Journey



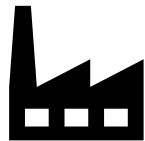
# Patching Challenges



**Vulnerability Disclosure**



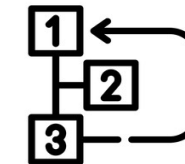
**Complex patching process**



**Growing complexity of OT systems**



**Patching Strategy and Deployment**



**Prioritization**



**Patch Ownership**

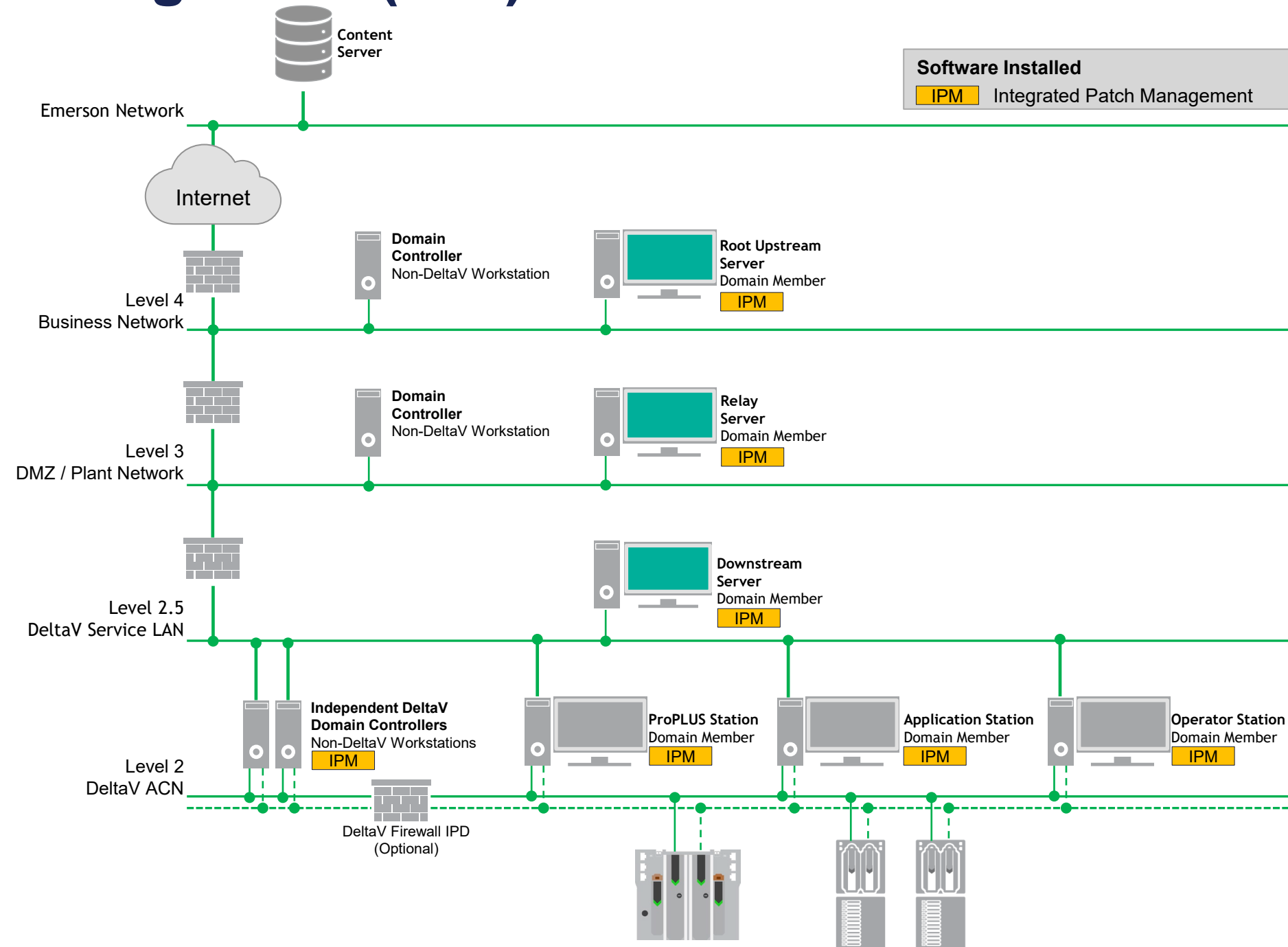
# Integrated Patch Management Overview

# DeltaV Integrated Patch Management (IPM)

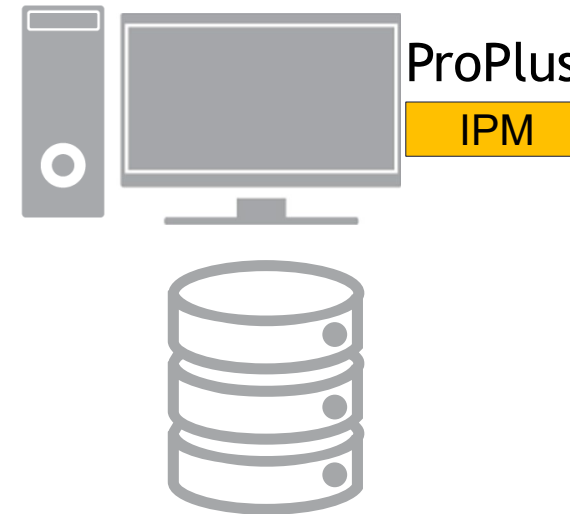
The next-generation patch management solution for DeltaV.

## Key Features

- Most secure patching solution available
- Easy to use interface for both locally or remotely maintaining your assets
- Flexible & scalable architecture to accommodate customer requirements
- Save hours of effort through automation

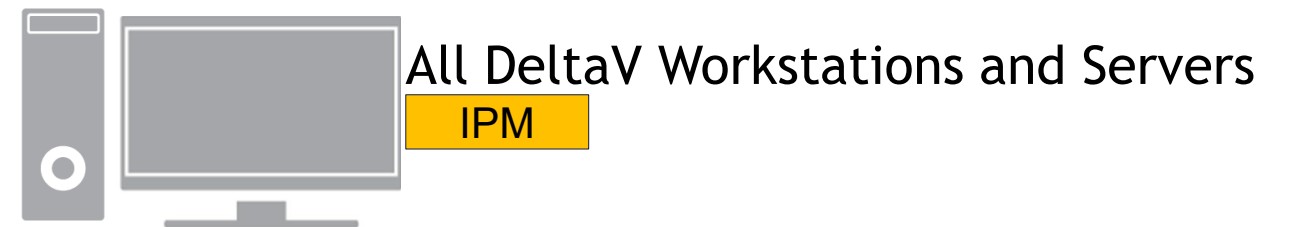


# How IPM Works



*DeltaV Database*

Populate IPM database with all workstation and device data



DeltaV workstations and servers provide current patch and hotfix levels (included embedded nodes) to the Downstream Server

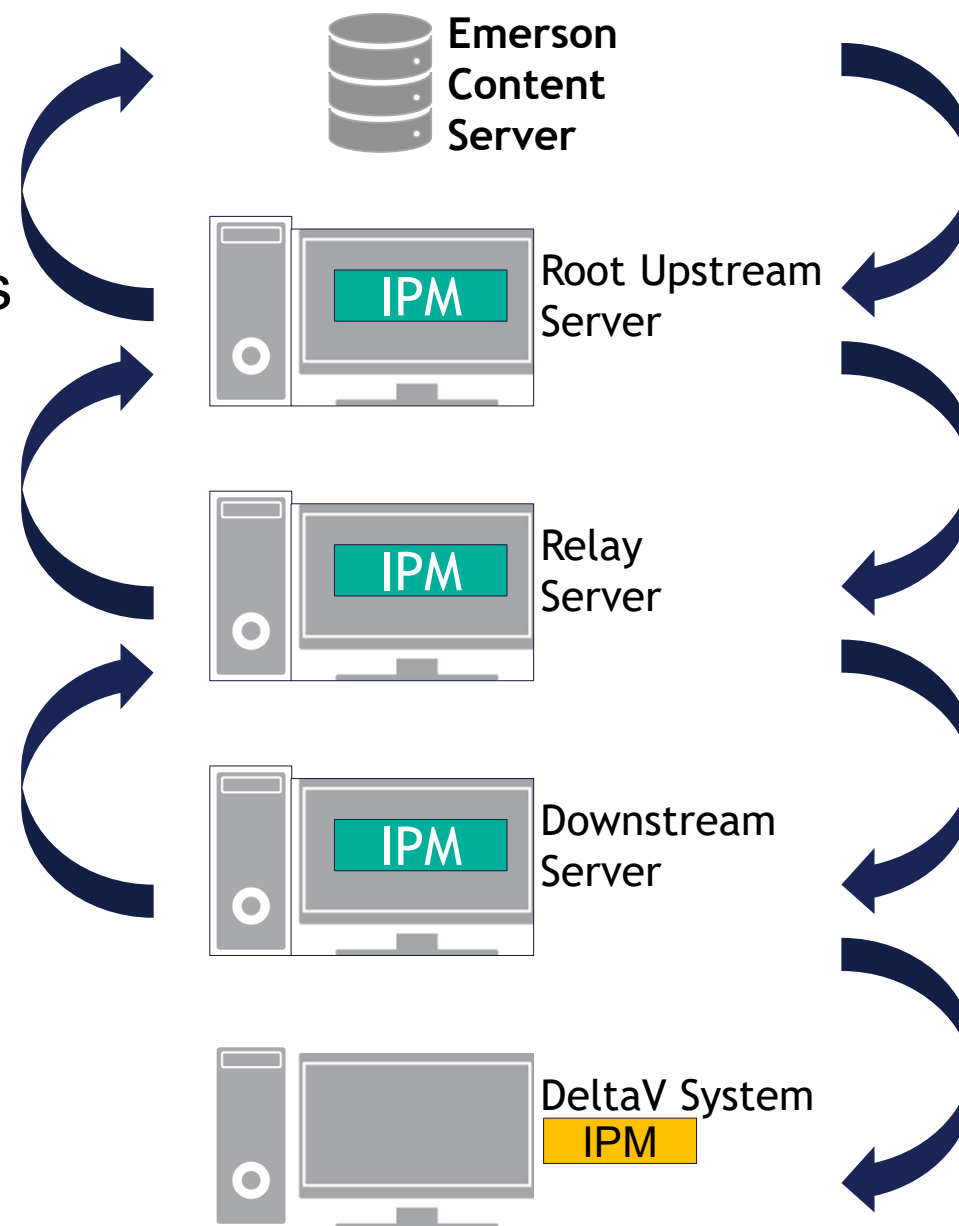
# How IPM Works (continued)

4

The Root Upstream server passes information onto the Emerson content server for processing.

3

Information about current patch levels are passed up to the Root Upstream Server.



5

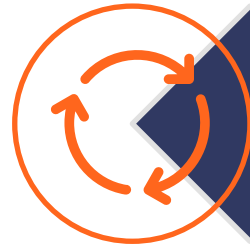
The content server determines what patches/hotfixes are required for each node. The Root Upstream downloads this information along with the required updates.

6

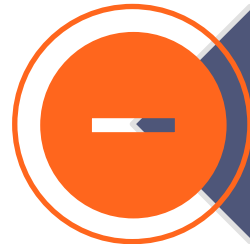
Downstream Server delivers patches to the DeltaV stations, waiting for installation.

# Implementation of IPM at Air Liquide

# Why IPM



**Automate Deployment of Updates:  
Reduce Time, Effort, Human Errors**



**Prioritize and Drive Compliance for  
Patching Requirements**



**DeltaV Hotfixes, Firmware, Anti-Virus,  
And Microsoft Updates**

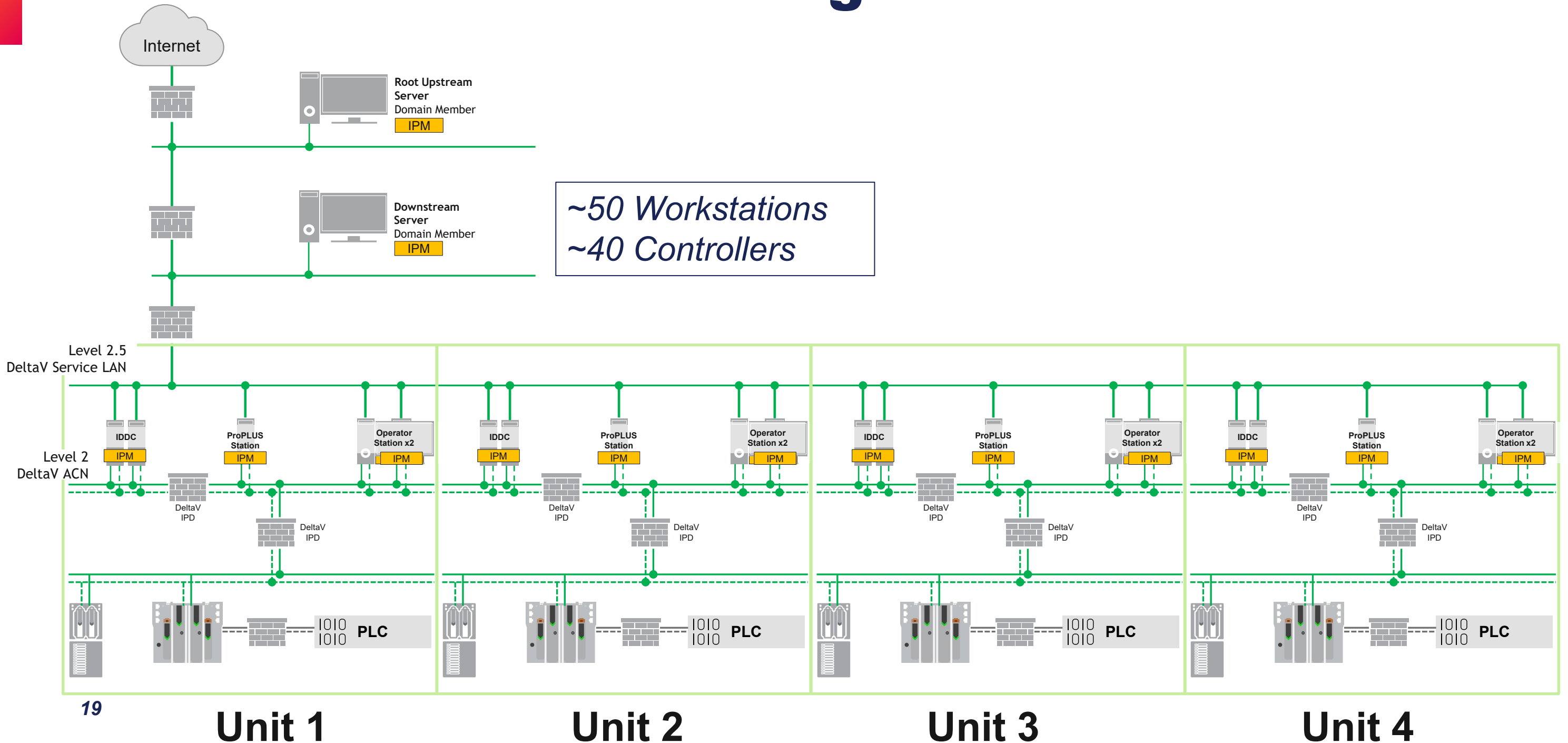


**Increase System Security and Secure  
Patching Process**

# Implementation at Air Liquide

 <b>Pilot Launch</b>	Internal approvals Manage risks	<b>Complete</b>
 <b>System Integration</b>	Infra deployment Flow configuration (Firewalls) Installation (4 Systems)	<b>Complete</b>
 <b>Test and Evaluation</b>	Report strength and weaknesses	<b>Complete</b>
 <b>Optimization</b>	Implement best practices	<b>In Progress</b>
 <b>User training</b>		<b>In Progress</b>
 <b>NA Fleet Rollout (~50 sites)</b>		<b>Not Started</b>

# Architecture of IPM integration



# IPM Console

*Node specific  
evaluation and  
patch  
recommendations*

*Ensure  
Compliance and  
review installed  
updates*

The screenshot shows the IPM Console interface for a node named IPMDS14LTS. The browser address bar shows localhost:49177/#/node-view. The interface includes a 'Check for Updates' button in the top right, a list of nodes on the left, and a main panel with 'General Information' and 'Available Updates (1)'. The 'Available Updates' section shows a table with one update: 'Security Update for Microsoft Windows (KB5037782)'. Below this is an 'Install Updates' button. At the bottom, there is an 'Installed Updates' section.

Update Name	Update Type	Restart Required
Security Update for Microsoft Windows (KB5037782)	Microsoft	Yes

*DeltaV, Antivirus, and  
Microsoft updates over  
secure connection  
back to Guardian.*

*Automated  
deployment of MS  
patches*

# IPM Product Enhancements

- IPM can help facilitate Risk Assessments
  - Understand what the update will impact and the importance of that update
- Pre-requisites for DeltaV hotfixes
  - IPM could inform and/or help remediate pre-reqs
- IPM support on other platforms (PLCs)
- Microsoft, AV, software updates (user added files)
- From Downstream Server, optionally limit patch distribution by system



# Exhibit #229 Guardian Software & Solutions / IPM

## Find More Information

### 6-1600 Let Integrated Patch Management Help Make You More Cybersecure and Efficient

- Wednesday 10:15-11:00 AM

### 5-1703 Streamlining Cybersecurity: Air Liquide and DeltaV Integrated Patch Management

- Thursday 2:15-3:00 PM

### 3-1868 Patch in a Flash! Use DeltaV Integrated Patch Management to Quickly and Securely Patch Your System

- Tuesday 1:15-2:00 PM, Wednesday 1:15-2:00 PM

### MTE-1907 Are you Ready for the Future of Industrial Cybersecurity?

- Wednesday 9:15-10:00 AM, Thursday 3:15-4:00 PM

## Contacts

[fowad.siddiqui@airliquide.com](mailto:fowad.siddiqui@airliquide.com)

[nick.yim@puffer.com](mailto:nick.yim@puffer.com) / [david.hemphill@puffer.com](mailto:david.hemphill@puffer.com)

[Matt.Kane@emerson.com](mailto:Matt.Kane@emerson.com)



EMERSON EXCHANGE 2025

ACCELERATING  
INNOVATION

# Thank You