Botlek
STUDIEGROEP

If it looks like malware, swims like malware and quacks like malware it probably is malware.

Botlek Studiegroep

Welcome to Emerson

Rijswijk September 1st 2022

EMERSON

Agenda

- 18.00 uur Ontvangst met broodje en drankje
- 19.00 uur Introductie
  - Welkomstwoord
  - Uitleg wat te verwachten & introductie sprekers
- 19.10 uur Cyber security I
  - Marcel Jutte - Hudson Cybertec
- 20.00 uur Pauze
- 20.15 uur Cyber security II
  - Pieter Kroon - Accountmanager ICT-opleidingen bij HBO Drechtsteden
- 21.00 uur Afsluiting
  - Dankwoord
  - Netwerkborrel

Emerson Automation Solutions

Carlo Totté
Sr. Solutions Consultant ICSS Benelux

Industries Served by Emerson

The Plantweb Digital Ecosystem: Enabling Top Quartile Performance With the Industry's Broadest Integrated Portfolio of Digital Transformation Solutions

PLANTWEB

Services

Analytics
Edge, On-Premise, and Cloud

Connectivity

Data

DIGITAL FOUNDATION

- Project, Lifecycle, and Educational Services
- Production Optimization
- Operator Performance
- Control & Safety Systems
- SCADA

DIGITAL TRANSFORMATION

Consulting & Implementation
- Digital Strategy & Cybersecurity
- Upskilling & Change Management
- Shutdowns, Turnarounds, & Outages
- Industry Expertise

Service Models
- Software-as-a-Service Cloud-Deployed Applications
- Connected Services Asset Expertise and Actionable Insights

Platforms & Software
- Asset Performance Platform — Connect, Analyze, and Collaborate
- Workforce Effectiveness — Digitally Enabled People
- Device & Machinery Diagnostics — Condition-Based Analytics
- Asset Health Apps — Pre-Configured Analytics
- Digital Twin — Plant & Asset Optimization

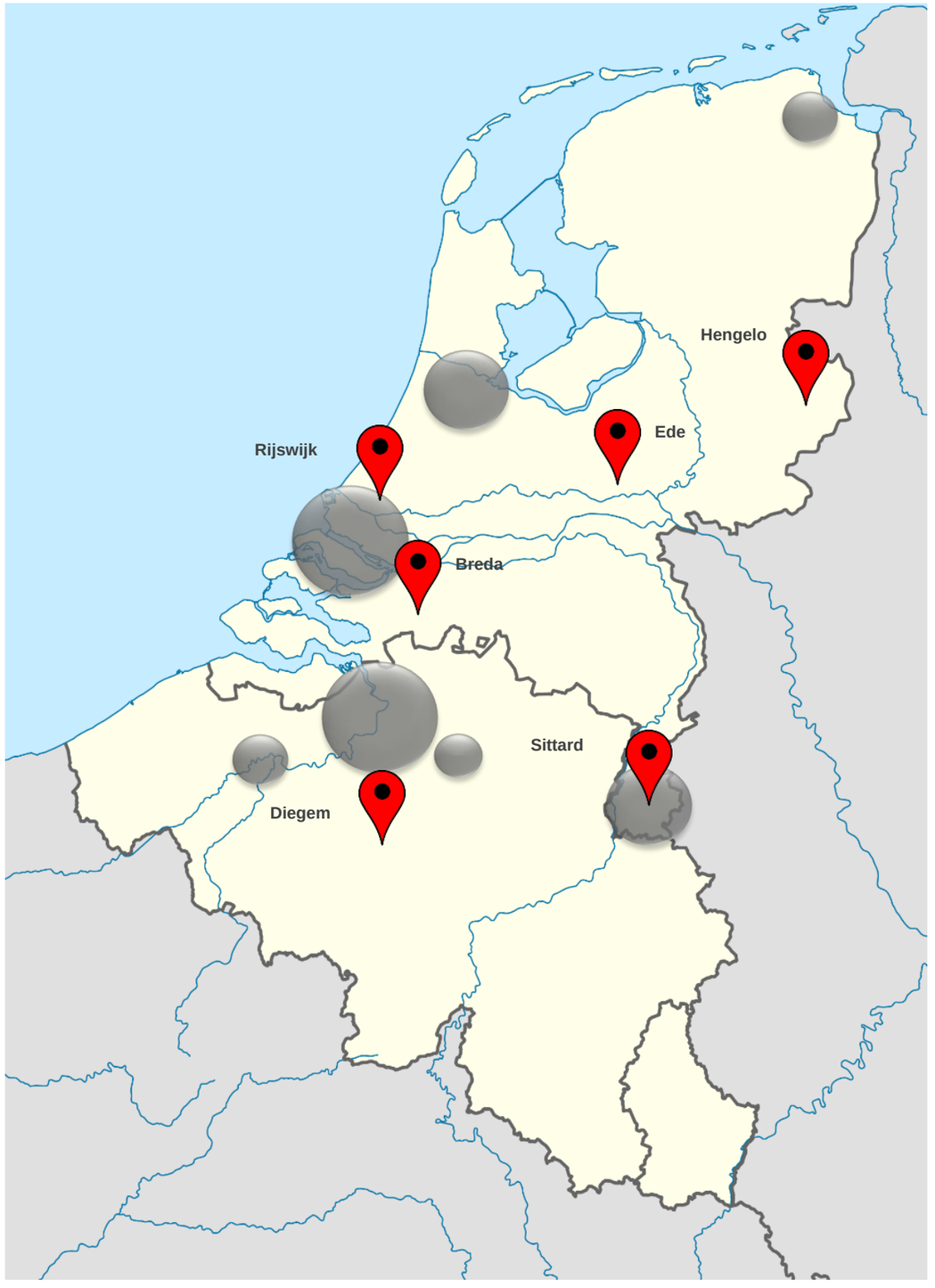
Secure Connectivity
- Data Integration — Architectures & Network Design
- Cybersecurity — Embedded at All Levels
- Secure First Mile — Data Pathways to External Applications and Experts

Intelligent Field Devices
- Measurement Instrumentation
- Valves & Actuators
- Motion Control

Pervasive Sensing
- Process
- Environment
- Equipment
- People & Assets

Emerson Benelux

- Emerson Benelux – 900 medewerkers



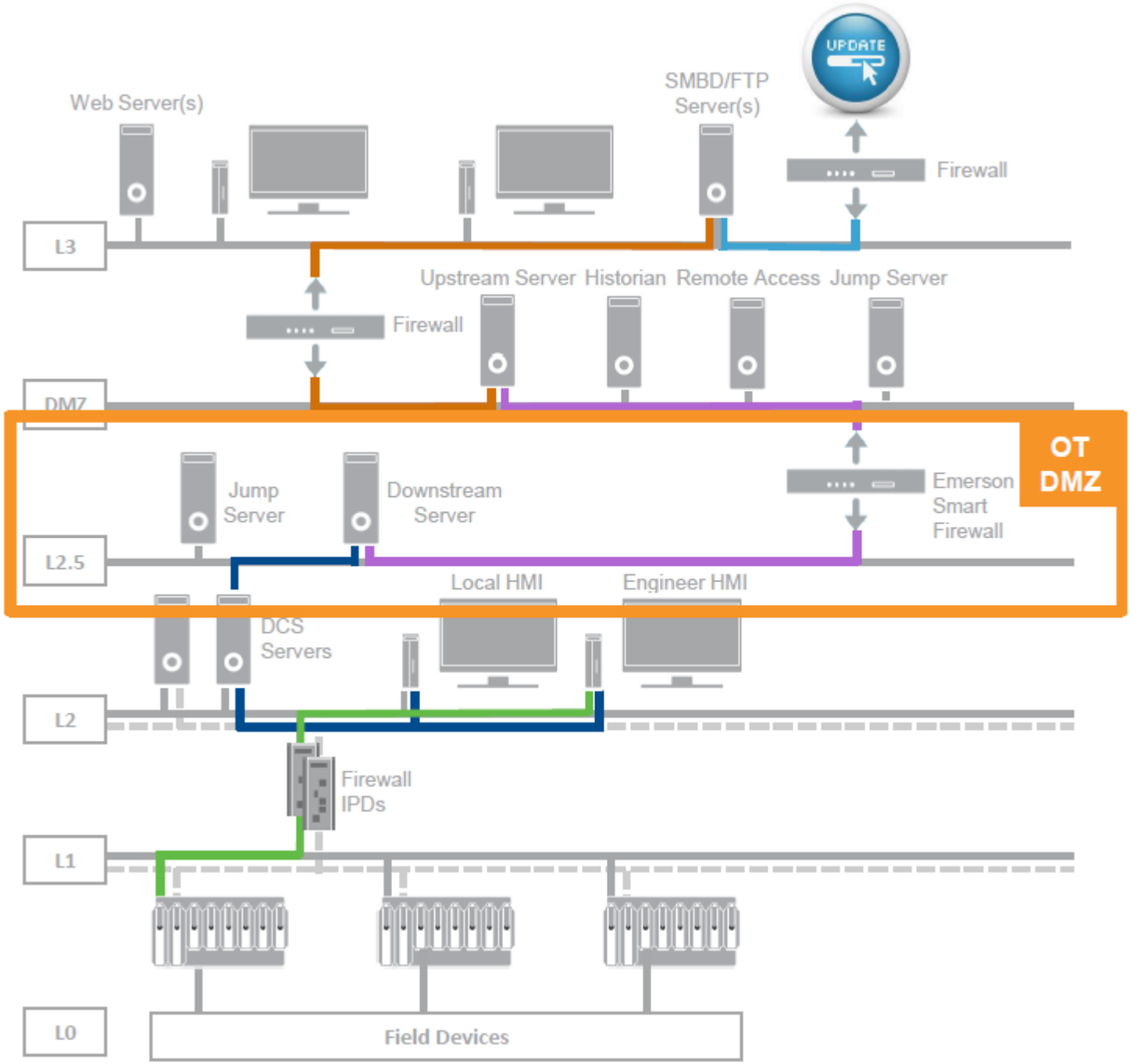
Twee namen:

- Systems - Dennie de Waart (Lifecycle Services)
- Support - Jeroen Bronkhorst (Cyber security)

DeltaV
Integrated Control & Safety System
Cyber Security

EMERSON

1. Segmentation – Firewall(s) & Level 2.5



The Emerson Smart **Firewall** provides the first line of protection for the Integrated Control & Safety System (ICSS).

A **DMZ** is applied to offer the first level of **segmentation** from the ICSS to the IT / Enterprise Network.

Implementing a Firewall and Level 2.5 DMZ allows secure connectivity for further Cyber Security solutions such as Endpoint Protection / Application Whitelisting and Advanced Patch Management.

2. Endpoint Protection & Application Whitelisting

Endpoint Security for DeltaV Systems

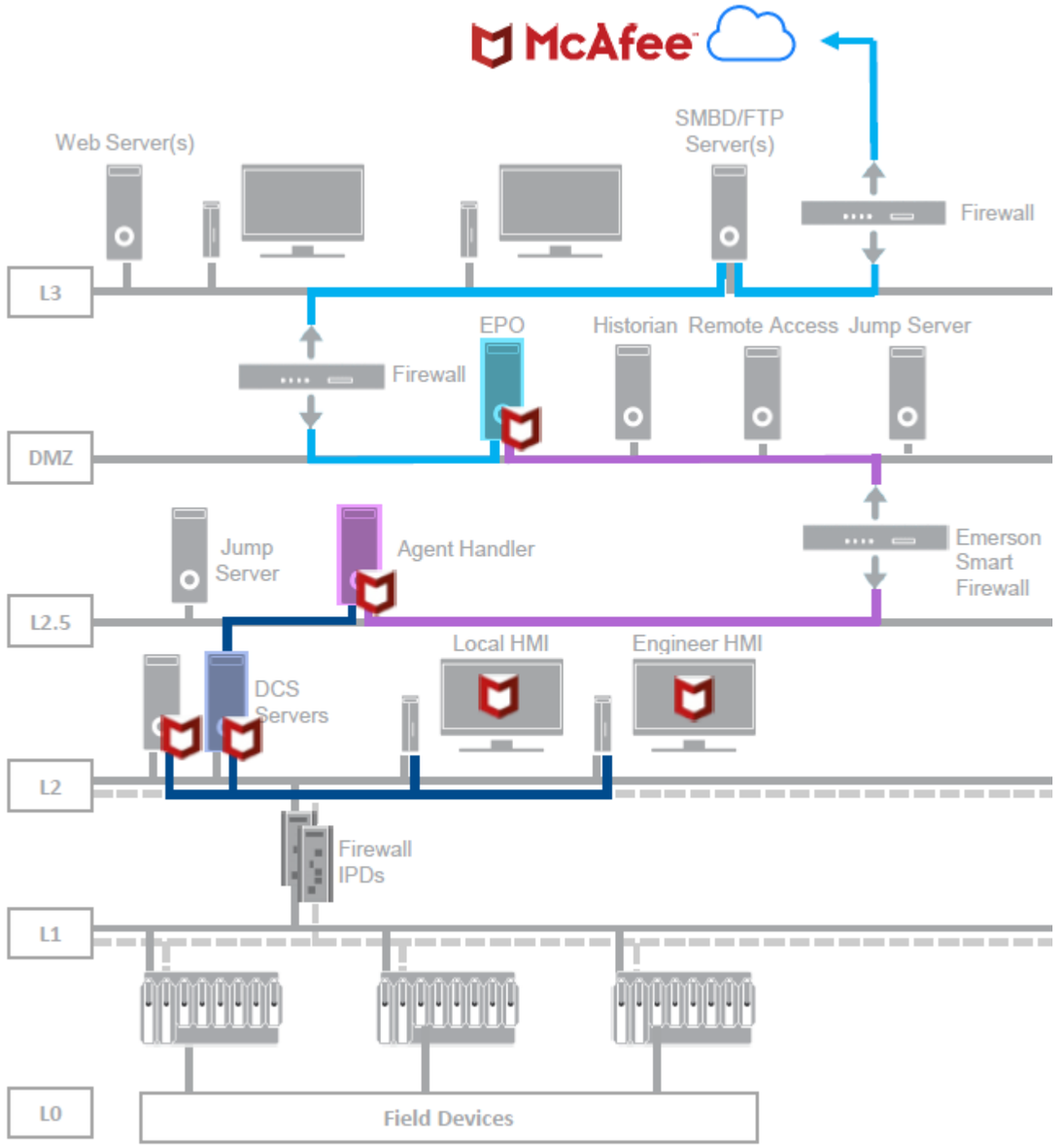
Protection against **known** threats

- Scan for threats
- Quarantine malicious files
- Deliver compliance
- Enable proactive response

Application Whitelisting for DeltaV Systems

Protection against **unknown** threats

- Block zero-day threats
- Eliminate whitelisting management
- Support file integrity
- Prevent unauthorized changes

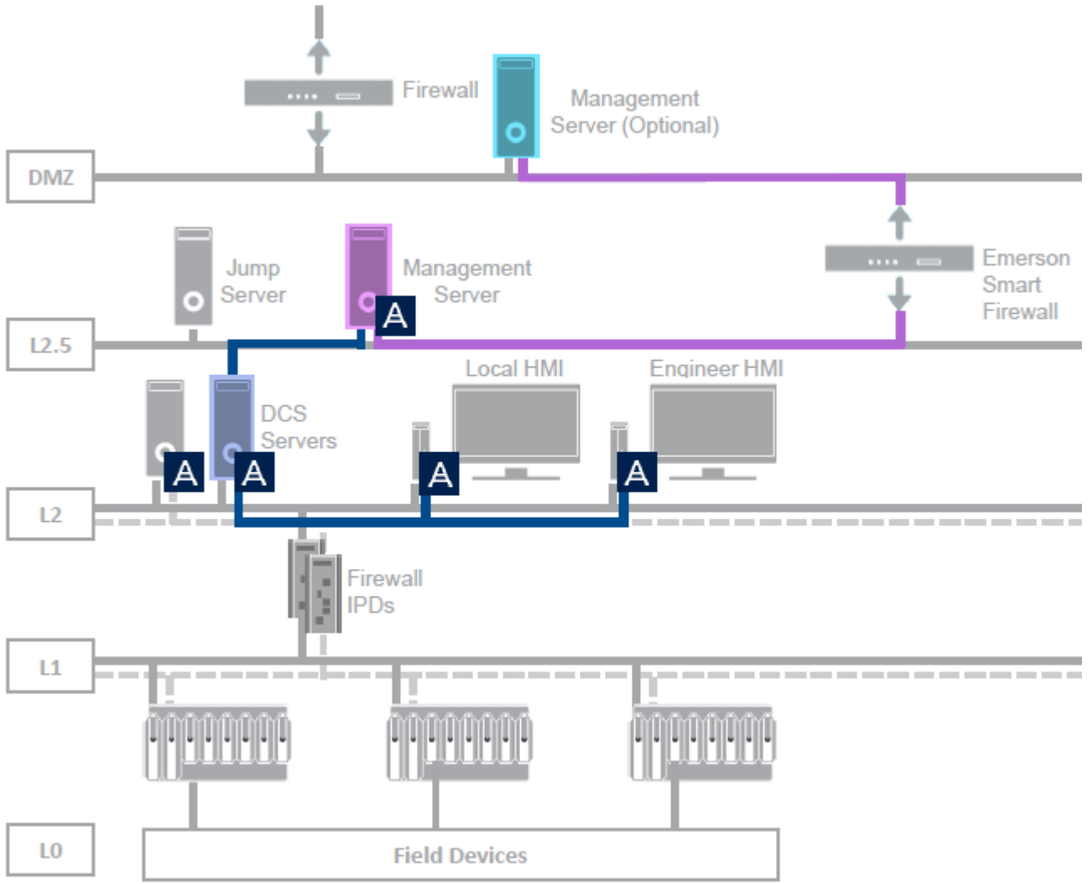


3. Backup and Recovery

Backup and Recovery for DeltaV:

- Provides an automated backup (and restore) utility
- Single solution for data protection and disaster recovery
- Eliminates errors and saves time associated with manual procedures
- Based on industry leading **Acronis** software
- Emerson DeltaV specific Backup Plan Templates
  - Included in the Backup and Recovery solution
  - Differentiates DeltaV Backup and Recovery from competitors

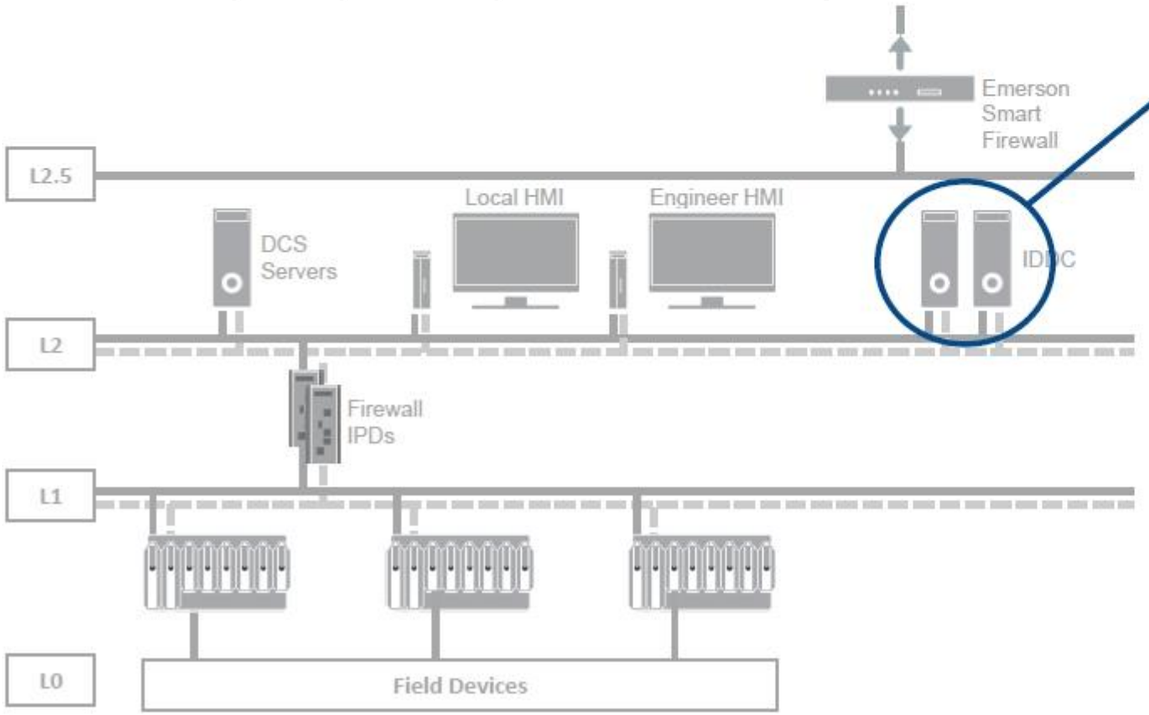
3 Backups
2 Media
1 Off-Site

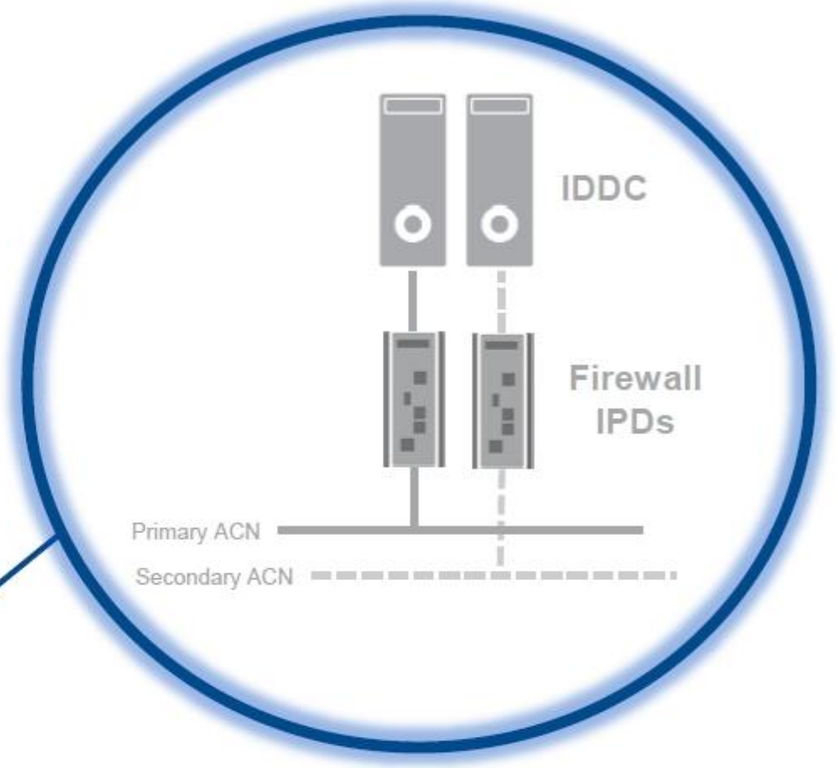


4. Independent DeltaV Domain Controller

The Independent DeltaV Domain Controller can be deployed on **standalone servers** instead of using the Professional Plus and Application Stations for the domain controller role.

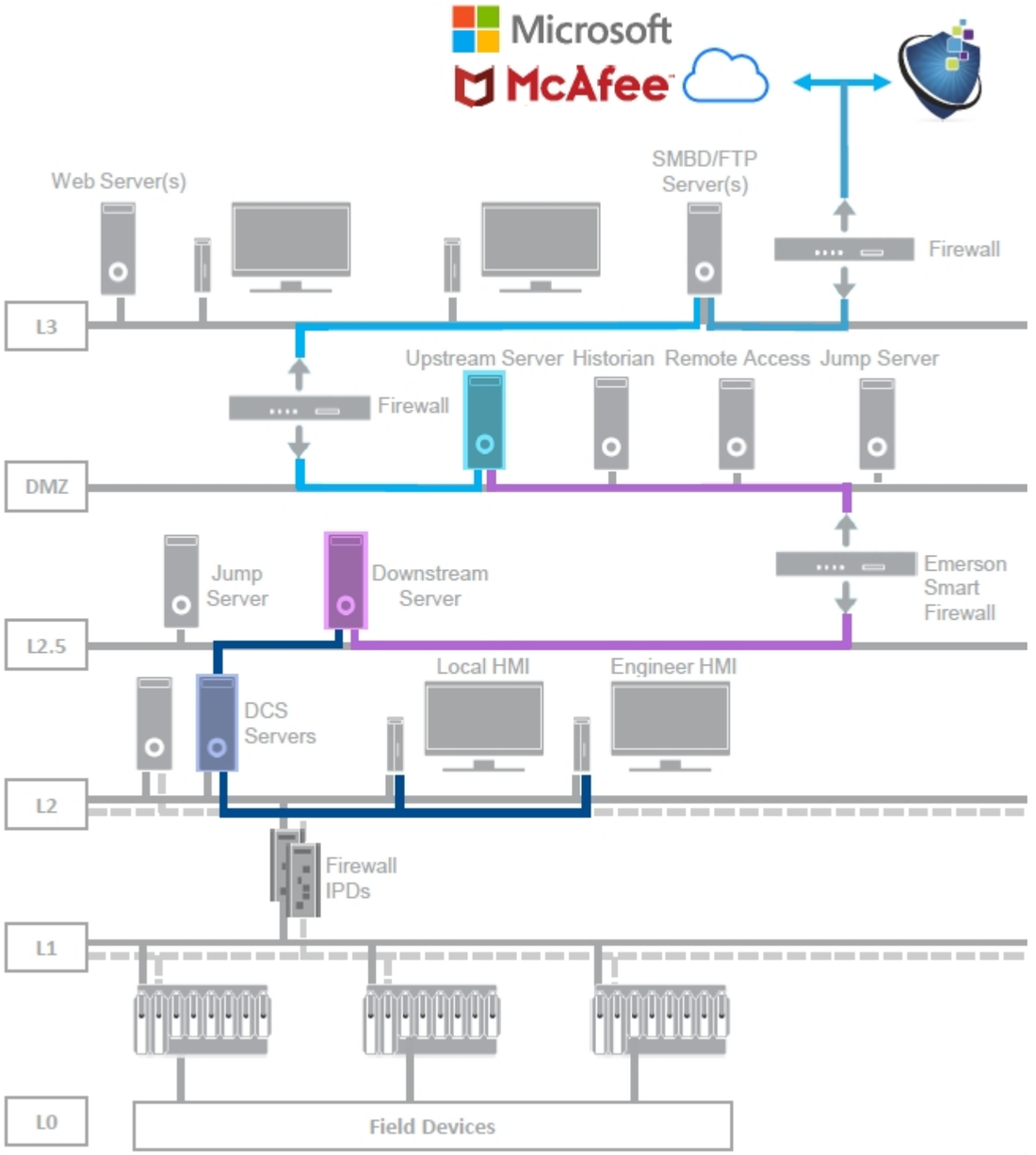
With multiple and physically separate domain controller's redundancy and **recovery** of your system are improved.





5. Integrated Patch Management

- Microsoft, McAfee & DeltaV **hotfixes**
- Downstream / Upstream communication **secured** via (**encrypted**) Transport Layer Security (TLS)
- Scalable Architecture
- Patching strategy is configurable to your requirements
- Easy installation and Environment checker
- Release strategy to improve features and tools of solution



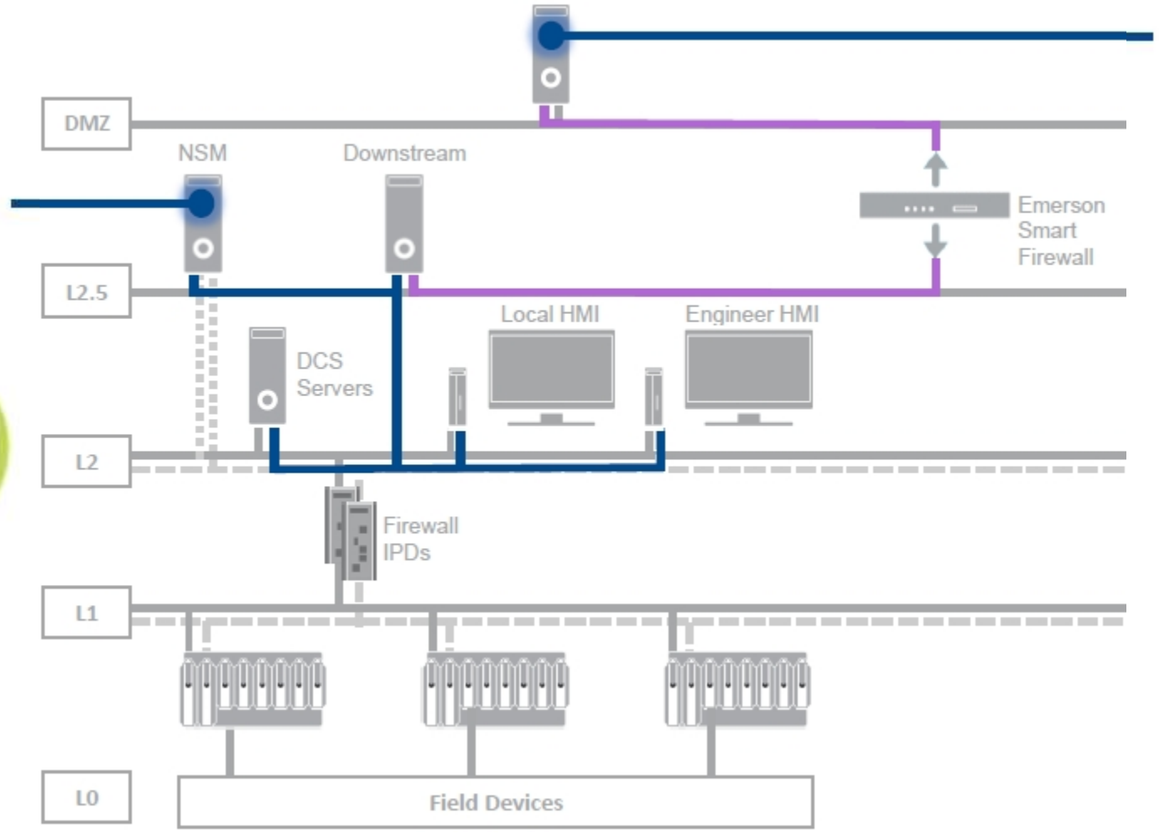
6. Network Security Monitoring & Security Information Event Management

Network Security Monitoring for DeltaV provides a **proactive defense** measure that continuously **monitors** network traffic to identify suspicious content or activity.

Security Information Event Management will collect, store and correlate system events and logs from the IACS. Using advanced threat detection capabilities, Dashboards can be developed to provide real time information of the security state of your IACS.

Network Security Monitor

Description: monitors the traffic on your DeltaV ACN to identify suspicious content and malicious activity.
Applicability: Custom solution designed for DeltaV systems.



SIEM for DeltaV Systems

Description: collects, stores, and correlates events and logs from your DeltaV system, including Windows O/S and network devices.
Applicability: Custom solution designed for DeltaV systems.

7. Lifecycle Management for Cyber Security

- Phase 1: Cyber Security Management System (CSMS)
  Setting the goals.
- **Phase 2: Risk Assessment (RA)**
  Identifying tolerable risk.
- Phase 3: Technical Countermeasures
  Implement Technical countermeasures.
- Phase 4: Training
  Plug the People Gaps.
  processcontrol.nl: Menselijke factor vaak doorslaggevend in cybercrime
- Phase 5: Cyber Security Resource(s)
  Fill the Organizational Gaps.
- Phase 6: Monitoring & Reporting
  Deliver Cyber Reports and insight.
- Phase 7: Lifecycle Cyber Security Managed Service

Have a great evening