



Real-Time AR Interaction with a Validated Digital Twin

End-to-End Operational Efficiency with AI-Driven Insights

Continuous Compliance and Audit-Ready Documentation

## FNT DC Vision: Visual Management of Infrastructures

Field Service Workforce Empowerment by Next-Generation DCIM with AR, AI, and a Single Source of Truth

The complexity of today's data centers continues to rise. Hybrid infrastructures, cloud platforms, industrial IT, and IoT demand full transparency and absolute reliability. At the same time, human error remains the number-one cause of outages. To meet these challenges, the tightly integrated solution of DC Vision and the digital twin by FNT Software delivers a new era of data center intelligence.

Together, both solutions form an end-to-end platform that unifies real-time physical insights, Augmented Reality (AR), Artificial Intelligence (AI)-driven recognition, and a validated digital twin as the single source of truth. This combination eliminates blind spots, reduces operational risk, accelerates processes, and ensures compliance with current and upcoming regulations.

Within FNT Software's overall portfolio DC Vision represents an attractive mobile touchpoint solution to empower the infrastructure management workforce in the field. The unique solution combines AI-powered device recognition and AR overlays, delivered via phones, tablets, and AR glasses, with an intuitive UI that makes it easy to use.

### FEATURES

 Mobile Asset Information

 Mobile Audit Execution

 Mobile Data Capture

 Mobile Task Execution

 Remote Training & Assistance



# FROM GUESSWORK TO CONTROL: THE INTELLIGENT DATA CENTER

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## The Problem:

- 50% of companies lack proper data center documentation
- Up to 80% of outages are caused by human error
- Up to 60% of outages cost more than \$100,000

**Why This Matters:** Poor documentation, manual processes, and skills gaps directly lead to downtime, risk, and unnecessary cost.

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## The Innovation:

- AI-, AR-, and Digital Twin-powered DCIM
- A single, unified source of truth for infrastructure data
- Real-time synchronization between physical and digital environments

**A New Standard for Data Centers:** This combination sets a new benchmark for precision, efficiency, and resilience in modern data center operations.

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## Operational Impact:

- Merge operational excellence, documentation, and error reduction
- 10x faster documentation with consistently high data quality
- Massively reduced rework and human errors
- Always up-to-date, audit-ready documentation
- Correct change implementation the first time

**How It Transforms Daily Work:** Engineers work faster and more accurately while minimizing risk and maximizing uptime.

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## Workforce Enablement:

- Up to 40% increase in task efficiency
- AR-guided workflows shorten training cycles
- Less dependency on senior experts
- Reduced training and travel expenses
- Lean teams enabled by shared digital twins and AR collaboration

**Doing More With Less:** Even with staff shortages, teams remain productive, consistent, and confident.

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## Business Outcomes:

- Up to 50% reduction in overall operational costs
- Fewer outages and faster resolution
- Better decisions through AI-driven insights and sensor data
- Permanent compliance readiness with zero guesswork

**Measurable Value:** Operational efficiency directly translates into cost savings, resilience, and better business decisions.



One digital twin. One source of truth. AI and AR working together to eliminate errors, boost productivity, and reduce data center costs.

## YOUR BENEFITS

### Always Accurate Infrastructure Visibility

Rapid initial inventory population and continuously high documentation quality ensure a trusted, real-time view of the data center – reducing errors, preventing outages, and enabling confident decision-making.

### Faster Operations and Service Delivery

AI-driven insights and AR-guided workflows accelerate service provisioning, troubleshooting, and issue resolution, significantly reducing downtime and mean time to repair (MTTR).

### Error-Free Changes and Audit Readiness

AR-assisted change execution and AI validation ensure infrastructure changes are implemented correctly the first time, while automated data accuracy simplifies audits and improves compliance quality.

### Workforce Productivity Despite Staff Shortages

AR-enabled guidance empowers less experienced staff to perform complex tasks reliably, helping organizations cope with skills gaps and worsening labor shortages without compromising quality.

### Lower Costs Through Higher Efficiency

Reduced human error, faster training, streamlined operations, and fewer outages translate directly into measurable cost savings and improved operational efficiency.



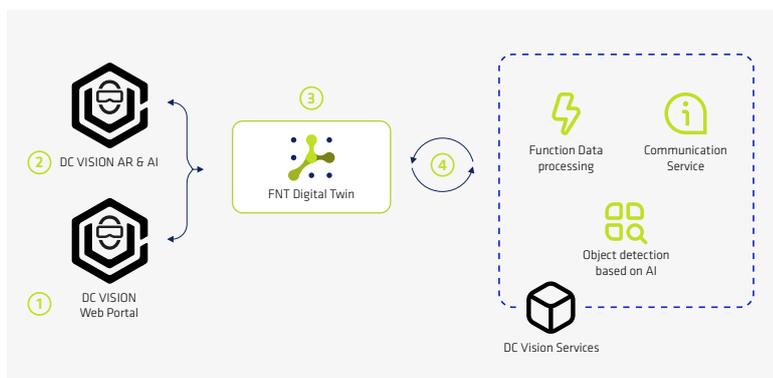
## A UNIFIED VIEW OF YOUR ENTIRE DATA CENTER

DC Vision brings real-time AR interaction directly to your racks and rooms. FNT Command provides the authoritative digital twin of all physical and logical infrastructure layers. The result is a seamless loop:

- DC Vision **captures, validates, and updates real-world data** on the spot
- FNT Command **stores, manages, and processes this information** in the **digital twin**

- All teams work with **100% consistent, audit-ready data**

This integrated approach empowers your organization to optimize daily operations, reduce outages, and ensure documentation excellence – fast, reliable, and future-proof.



- 1 Configure the application setting and connection to FNT Command;
- 2 Start DC Vision®;
- 3 Provision the digital twin, which is presented via an AR-capable device;
- 4 Continued processing of data between digital twin, engineer, and backend information; Development of an augmented digital twin with AI capabilities to identify existing components; Collaboration between remote engineers and on-site staff.

### END-TO-END INVENTORY TRANSPARENCY THROUGH AR, AI, AND A VALIDATED DIGITAL TWIN

Accurate asset documentation is the foundation of every resilient data center. Yet most organizations struggle with outdated, incomplete, or inconsistent inventory data. The integrated solution of DC Vision and the FNT Digital Twin closes this gap once and for all.

#### How it works:

- FNT Command serves as the central, authoritative digital twin for all physical and logical devices, racks, connections, and spaces.
- DC Vision provides an AR-enabled interface at the rack, allowing technicians to scan assets with a mobile device.
- Built-in AI recognition automatically identifies make, model, and form factor during scanning.
- Missing or incorrect data is captured on the spot and sent directly to the FNT Digital Twin for immediate synchronization.
- Updated information becomes instantly available across planning, operations, and compliance processes.

This eliminates the need for manual lists, spreadsheets, and costly periodic physical inventories. Instead, organizations benefit from continuous inventory accuracy.

#### Resulting Benefits:

- ✓ A complete, **real-time inventory** across all locations
- ✓ **Seamless reconciliation** between physical and documented environments
- ✓ **Faster planning cycles** and reduced operational risks
- ✓ Drastically **simplified audits** and **regulatory reporting**



### EXPERT KNOWLEDGE EVERYWHERE – SUPPORTED BY AR AND THE DIGITAL TWIN

Data center teams are under pressure: experienced engineers are scarce, and training newcomers requires significant time and travel. With DC Vision and the FNT Digital Twin, expertise becomes available anytime, anywhere, enabling faster decisions and safer interventions.

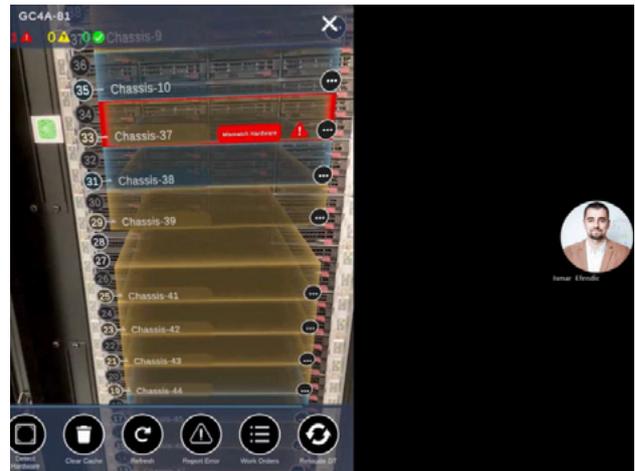
#### How it works:

- On-site engineers use DC Vision to initiate a remote assistance session with experts or senior colleagues.
- Integration with platforms such as Microsoft Teams or Webex ensures immediate connectivity.
- The remote expert sees a live video feed of the actual rack, enriched with contextual data pulled from the FNT Digital Twin, including device details, port information, and historical changes.
- AR annotations allow the expert to highlight components, guide hands-on actions, and ensure correct execution of tasks.
- This same capability is used for structured training sessions, enabling junior engineers to learn by doing with step-by-step support.

This dramatically accelerates knowledge transfer and eliminates the need for experts to travel on-site.

**Resulting Benefits:**

- ✓ **Faster issue resolution** and fewer escalations
- ✓ **Accelerated onboarding** for new employees
- ✓ **Consistent guidance** backed by verified digital twin data
- ✓ **Lower travel and training costs**
- ✓ **Increased safety** and quality during on-site tasks



**3. TASK EFFICIENCY**

**FASTER WORK EXECUTION THROUGH AR GUIDANCE AND DIGITAL-TWIN CONTEXT**

Every day, engineers must execute tasks such as patching, installations, removals, inspections, and troubleshooting. Errors or misunderstandings often lead to rework, service disruption, or extended downtime.

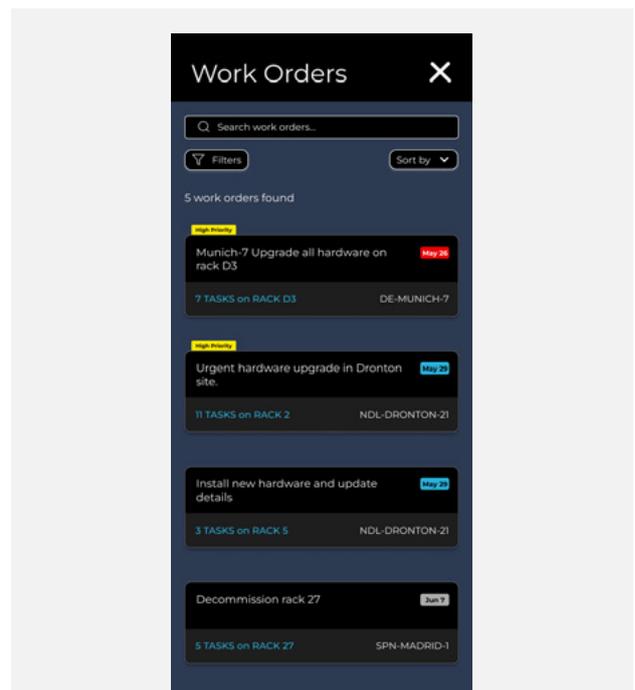
The combination of DC Vision and the FNT Digital Twin transforms these workflows into highly efficient, error-resistant processes.

**How it works:**

- Engineers access all task-relevant information directly in DC Vision: instructions, device data, port assignments, cabling diagrams, and documentation.
- AR overlays guide the engineer visually, showing:
  - The exact device or U-level to work on
  - The correct ports or cables to touch
  - Required steps pulled from ticketing or workflow systems
- The digital twin in FNT Command ensures that only validated, correct, and up-to-date information is displayed.
- After task completion, results are confirmed through DC Vision and synchronized instantly back to FNT Command.
- Real-time feedback and validation prevent errors and ensure tasks are executed correctly on the first attempt.
- This eliminates ambiguity, guesswork, and the need for printouts or manual notes.

**Resulting Benefits:**

- ✓ Up to **40% faster task execution**
- ✓ Potential **75% reduction in rework and human error**
- ✓ **Consistent documentation** without additional effort
- ✓ **Higher engineer productivity**, even with limited staffing
- ✓ **End-to-end digital workflows** without media gaps



## CONTINUOUS AUDIT READINESS

Data center operators face increasing regulatory pressure. Standards like NIS2, DORA, CER, and ISO 27001 require precise, complete, and continuously updated infrastructure documentation. Failure to comply can lead to significant penalties.

The joint DC Vision + FNT Digital Twin solution enables permanent audit readiness across all facilities.

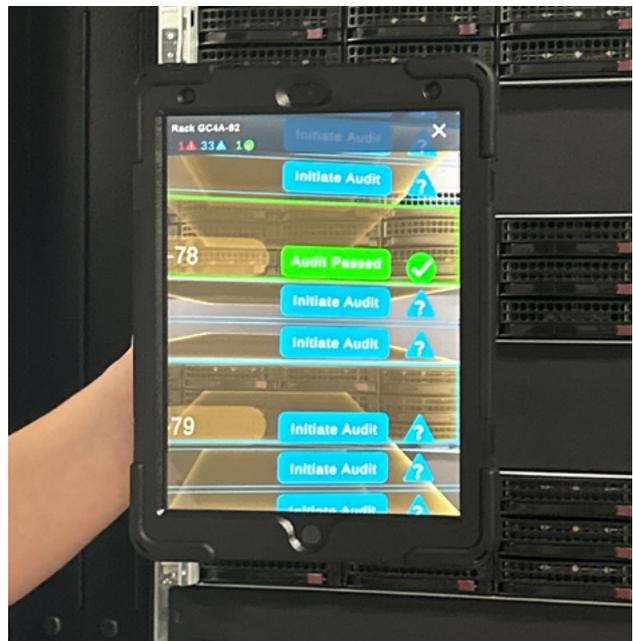
### How it works:

- FNT Command contains the full digital twin of all physical elements – racks, servers, network devices, cables, power paths, cooling systems, and configuration data.
- DC Vision gives engineers on-site AR access to this data and enables real-time updates directly at the rack.
- Any change – whether planned or unplanned – is immediately reflected in the digital twin via seamless API integration.
- The need for periodic manual inventories is dramatically reduced or eliminated.
- Documentation is always consistent, accurate, and ready for audit, backed by a verified digital source of truth.

In addition, the system supports mixed reality visualizations to quickly identify inconsistencies, missing documentation, or potential security vulnerabilities.

### Resulting Benefits:

- ✓ **10× faster documentation and audit preparation**
- ✓ **Real-time compliance** with regulatory requirements
- ✓ **Error-free documentation** directly from the field
- ✓ **Minimized compliance risks** and penalty avoidance
- ✓ **Reliable, traceable, and complete change history**



**With FNT DC Vision, DC Smarter and FNT Software unite to deliver an instantly deployable, real-time solution that intelligently connects, visualizes, and optimizes all digital and physical data center resources.**

Built for today and designed for tomorrow, the solution continues to evolve through the power of AI, machine learning, and augmented reality. Backed by advanced analytics, immersive visualization, and a strong commitment to continuous innovation, FNT Software and DC Smarter are dedicated to enabling seamless, sustainable, and smart data center operations – today and in the future.

**FNT**  
// simplify complexity

  
**DC SMARTER**