



// FNT Solutions for Enterprise IT Infrastructure
Management & DCIM

What can FNT do for you?



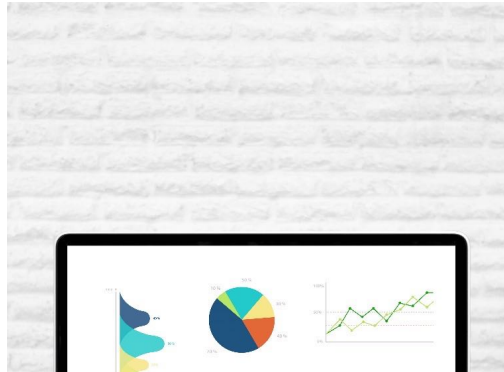
// The 4 major Solutions in BL Enterprise IT Management

Workplace Infrastructure Management



Document and manage workplace devices: PCs, laptops, virtual WPs, monitors, printers, phones, conference room equipment, IP addresses

Application & Server Infrastructure Management



Document and manage application & server infrastructure devices: Servers (physical & virtual), storage units, software instances, IP addresses

Enterprise Connectivity Management



Document and manage network infrastructure devices & connections: Routers, switches, cabling & connections (copper, optical, wireless, WAN)

Enterprise DC Infrastructure Management



Document and manage Enterprise IT datacenter equipment & operations: Rooms, cages, racks - space, power, cooling, access control

What can FNT do for you?



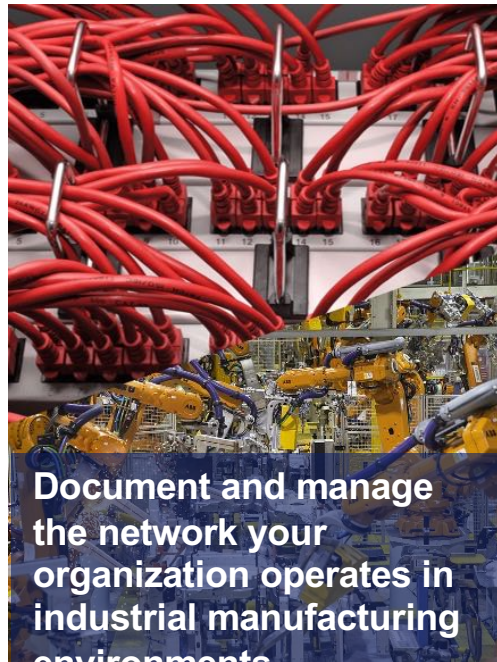
// Sub-dividing “Enterprise Connectivity Services Management” into 3 focus area solutions!

Enterprise Connectivity Management Internal Network



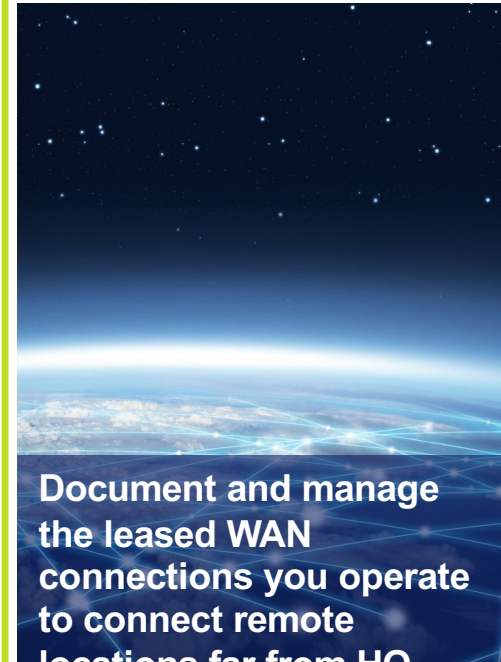
Document and manage the network your organization operates in office buildings and outside on the campus

Enterprise Connectivity Management OT Network (Manufacturing)



Document and manage the network your organization operates in industrial manufacturing environments

Enterprise Connectivity Management External Connectivity



Document and manage the leased WAN connections you operate to connect remote locations far from HQ

Enterprise IT Solutions: Strategic considerations and possible Enterprise solution implementation paths!



// No Big Bang required: Cover your complete infrastructure landscape following the approach fitting your needs and strategy best!

**Workplace
Infrastructure
Management**

**Application
Infrastructure
Management**

**Enterprise
Connectivity
Management**

**Enterprise
DC Infrastructure
Management**

„Streamline from the workplace front to the inner core!“

„Grow successfully from the network!“

„Spread from the heartbeat of your applications!“

„Drive the power outwards from your IT's nexus!“

// A three-tiered maturity level approach with options tailored to boost Enterprise IT & DataCenter Infrastructure Management

High

FNT Solutions in a maturity level view



Low

Designed to drive your organization to higher levels of excellence!

The effects

// Along the maturity levels you push your organization towards higher excellency in process acceleration & automation, user & service centricity!

Workplace Infrastructure Management

Application Infrastructure Management

Enterprise Connectivity Management

Enterprise DC Infrastructure Management



How specifically to overarching infrastructure capabilities



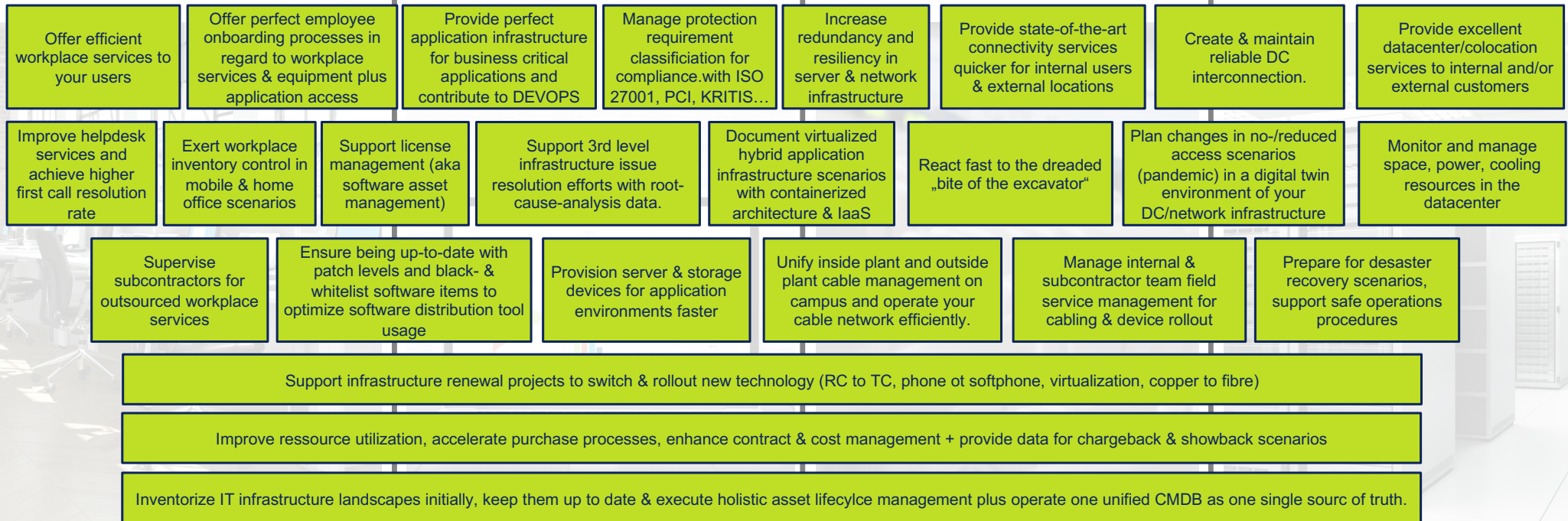
// Use Cases on the solution canvas: Creation of value along processes

Workplace Infrastructure Management

Application Infrastructure Management

Enterprise Connectivity Management

Enterprise DC Infrastructure Management






**// FNT Solutions for Enterprise IT Infrastructure:
Benefits**

// Use Cases & benefits of using the FNT Solutions in Enterprise IT & DCIM

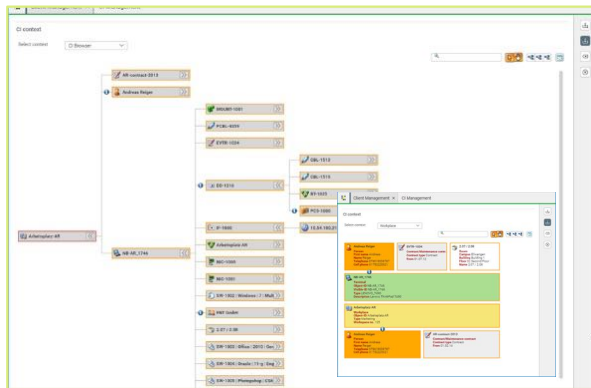


- **Gain a massively transparent insight** into your IT Infrastructure in every major field of infrastructure operations: **Workplaces, Applications and Server Landscape, Network internally and externally, DataCenter Operations.**
- **Manage hybrid infrastructure** sourcing constellations **in cross-technology and multi-provider environments to stay in control of centralized infrastructure, the Edge and Cloud.**
- **Identify and eradicate** potential **points of failure** strengthening **redundancy, resiliency & security.**
- **Optimize resource utilization** by detecting unused reserves, identifying idling servers and other equipment being operated for already discontinued services. Actively manage port capacity.
- **Bring down your datacenter PUE** & contribute to the efforts towards to achieve **better sustainability & decarbonization** in your **GreenIT initiatives** by shining a light into **greyspace AND whitespace.**
- **Save cost** by optimizing contracting & **reduce manpower effort** in planning, operations & maintenance.
- **Plan** extensions & changes **effortlessly and reliably. Provide services faster** - decrease processing duration and **improve reaction and resolution times** for incidents & problems to **increase user & customer satisfaction.**
- **Analyze, streamline and automate processes** along infrastructure provisioning.
- Be always ready to **excel in compliance audits** mandated by governance regulations & authorities.



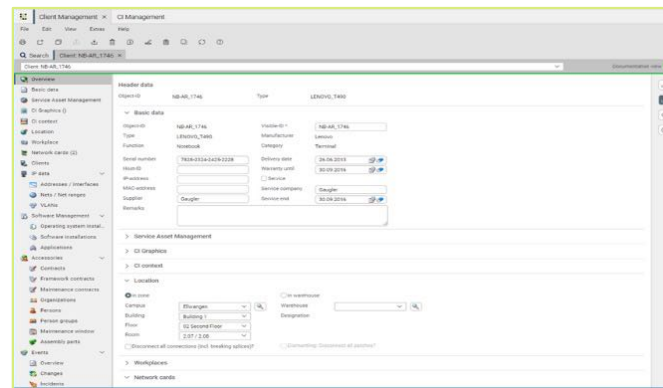
**// FNT Solutions for Enterprise IT Infrastructure:
Workplace Infrastructure Management**

// Workplace Infrastructure Management: A quick overview.



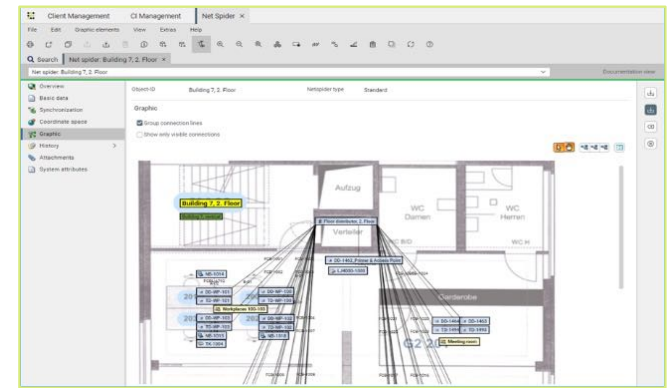
Client and Software Management

The workplace with all its CIs and dependencies in overviews: Notebook, extra monitor, network cards, interfaces, IP address, software, main user, maintenance contract, mobile phone, softphone, master location, etc.



CMDB & Asset features for workplaces

Every single CI/asset with detailed information about all its properties (technically as well as commercially), a complete change history and linked incidents and change tickets of the customers helpdesk/ticketing system.



Workplace location management

Combined point solution approaches allow to make the intersection between workplace management and network/connectivity management transparent and actionable: A netspider view of an office floor!

// UseCases: The questions the solution provides answers for!

Workplace Infrastructure Management



Advanced
Maturity
Level

Standard
Maturity
Level

Basic
Maturity
Level

Options

- **How many workplaces do I operate?** Per country, per unit, per building,...
- **Where are these workplaces?** Geographically, organization-wise, zonewise,...
- **Who is the main user of any given workplace? Who is the responsible manager?**
- **How do I identify these workplaces?** Serial #, internal inventory #,...
- **What are their configurations?** Main device, accessory devices, manufacturers, models,...
- **What software with does run on these workplaces?** OS, applications, utilities,...
- **What lifecylce phase are those workplaces in?** Maintenance contract coverage, manufacturer support, end-of-life activities,...
- **What operational status are these workplaces in?**
- **Which tickets are linked to any given workplace in the helpdesk system?** ITIL-conform incident/problem handling support,...
- **What amounts of reserve devices and spareparts do I have in which inventory?**
- **How are my workplace infrastructure CIs linked into the network and IPAM structures?** To which network are they assigned? What's their IP adress?

// UseCases: The scenarios the solution supports

Workplace Infrastructure Management




Advanced Level

Standard Level

Basic Level

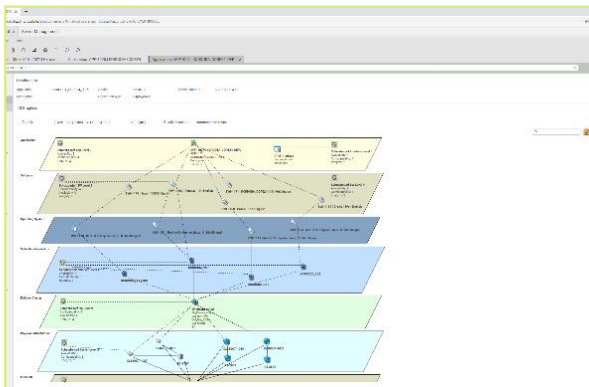
Options

- **Perform state-of-the-art Asset Management for all workplace infrastructure-related IT assets and exert full lifecycle control.**
- **Initial workplace landscape inventory buildup:** Document an unknown or badly documented situation with initial inventORIZATION (barcode scanning integration, autodiscovery data integration, classic manual inventory approaches)
- **Post merger workplace inventory data consolidation:** Integrate and merge data from multiple inventories after taking over new organizations
- **Workplace landscape changes & extensions:** Prepare and plan for as well as monitor progress of rolling out workplaces into new buildings, floors and rooms or moving parts of the organization between buildings, floors and rooms
- **Workplace technology changes:** Prepare and plan for as well as monitor progress of substituting existing workplaces with new technology e. g. shifts from fat to thin client configurations, series/modell replacements
- **Single source of truth for all workplace inventory issues:** Support constant inventORIZATION, manage spare part reserves, easily maintain a perfect and up-to-date database for all helpdesk & ticketing systems, all ERP Financial Asset Mgmt and Procurement solutions, compliance management systems, provide essential base data for chargebacks...
- **Desaster & crisis support:** At any time know which company hardware can be used to equip home office locations, ensure its flawless operation there, keep track of its whereabouts and monitor their complete return.



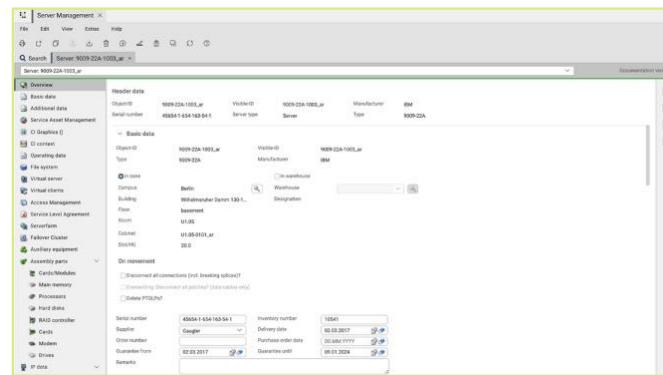
**// FNT Solutions for Enterprise IT Infrastructure:
Application Infrastructure Management**

// Application Infrastructure Management: A quick overview.



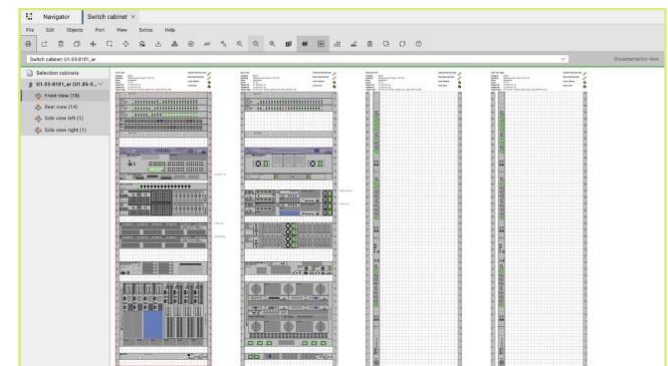
Server and Software Management

An important application supporting a crucial business process with all CIs/Assets and dependencies in overview: The application itself, installed software instances, virtualized server functions, cluster, physical servers,...



CMDB & Asset features for servers

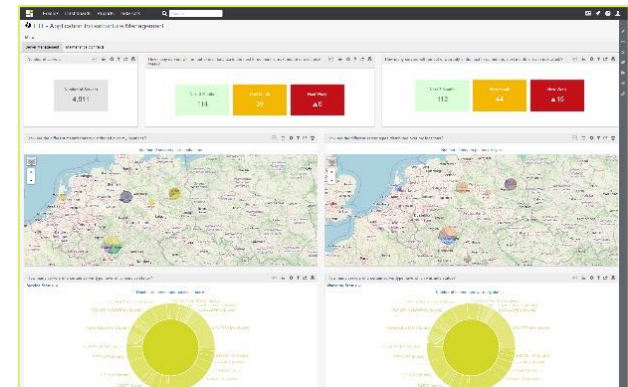
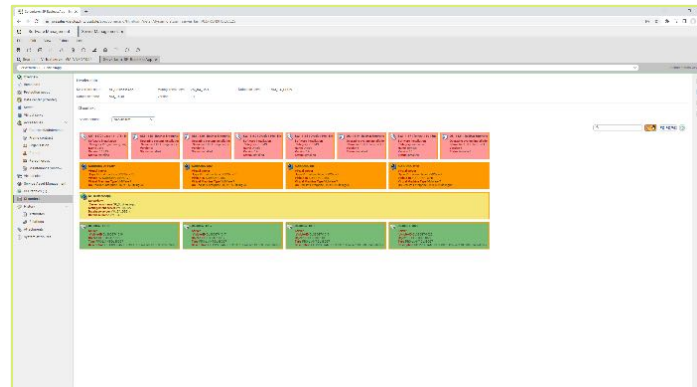
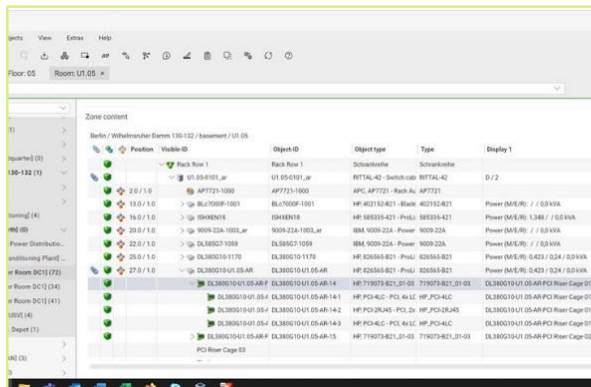
Every single server CI/asset with detailed information about all its properties (technically as well as commercially), a complete change history and linked incidents and change tickets of the customers helpdesk/ticketing system.



Physical server management with graphical display assistance

The physical layer of the application & server infrastructure with interactive graphic representation: Servers, storage units within their racks in photorealistic quality.

// Application Infrastructure Management: A quick overview.



Zonal localization and composition
Servers on the physical layer within their zonal location for easy navigation and identification.

CMDB & Asset features for servers
The virtual and logical layer structure on top of the physical layer: Virtualized application-, web- & database-servers with installed software instances in the context of a serverfarm.

Analytics for Application Infrastructure
Deep insights into application infrastructure, server & storage infrastructure with early-warning functions for status changes, maintenance contracts ending, elements running out their warranty period.

// UseCases: The questions the solution provides answers for!

Application & Server Infrastructure Management



Advanced
Maturity
Level

Standard
Maturity
Level

Basic
Maturity
Level

Options

- **How many servers, storage units, databases,... do I operate?** Physical, virtual, clusters,...
- **Where are these server infrastructure units?** Geographically, organizationally, zonewise,...
- **For what purposes is each of these server infrastructure units actually in operation?** Application, business process, data pool,...
- **For whom is each of these server infrastructure units operated?** Subsidiary company, department, team, responsible manager,...
- **How do I identify these server infrastructure units?** Serial #, internal inventory #,...
- **What are their configurations?** Main device, accessory devices, manufacturers, models...
- **What software with does run on these workplaces?** OS, applications, utilities,...
- **What lifecylce phase are those workplaces in?** Maintenance contract coverage, manufacturer support, end-of-life activities,...
- **What operational status are these server infrastructure units? Which tickets are linked to any given unit in the helpdesk system?** ITIL-conform incident/problem support...
- **What amounts of reserve devices and spareparts do I have in which inventory?**
- **How are my application & server infrastructure CIs linked into the network and IPAM structures?** To which network are they assigned? What's their IP adress?

// UseCases: The scenarios the solution supports

Application & Server Infrastructure Management



Advanced
Maturity
Level

Standard
Maturity
Level

Basic
Maturity
Level

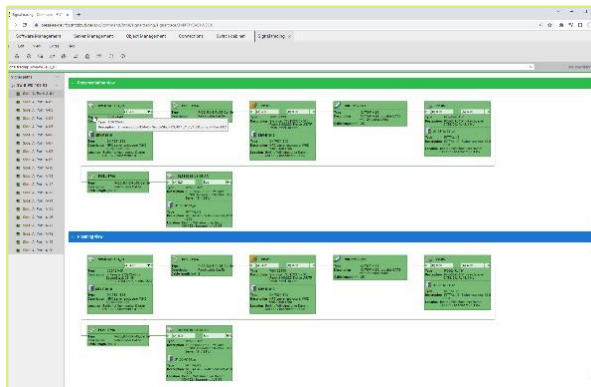
Options

- **Perform state-of-the-art Asset Management for all application & server infrastructure-related IT assets and exert full lifecycle control.**
- **Initial application & server infrastructure-related landscape inventory buildup:** Document an unknown or badly documented situation with initial inventORIZATION (barcode scanning integration, autodiscovery data integration, classic manual inventory approaches)
- **Post merger application & server infrastructure inventory data consolidation:** Integrate and merge data from multiple inventories after taking over new organizations
- **Application & server infrastructure landscape operation optimization:** Get an insight and identify idling servers and storage units that usually everyone is afraid to touch and switch off to save cost
- **Application & server infrastructure landscape changes & extensions:** Prepare and plan for as well as monitor progress of rolling out server replacements, new models from new manufacturers,...
- **Application & server infrastructure technology changes:** Prepare and plan for as well as monitor progress of substituting existing infrastructure with new technology e. g. shifts from applications directly operated on dedicated hardware to virtualized infrastructure
- **Single source of truth for all Application & server infrastructure inventory issues:** Support constant inventORIZATION, manage spare part reserves, easily maintain a perfect and up-to-date database for all helpdesk & ticketing systems, all ERP Financial Asset Mgmt and Procurement solutions, compliance management systems, provide essential base data for chargebacks...
- **Desaster & crisis support:** Prepare and have contingency plans for unforeseen events by ensuring that the overall infrastructure setup has sufficient redundancy & fallback options integrated.



**// FNT Solutions for Enterprise IT Infrastructure:
Enterprise Connectivity Management**

// Enterprise Connectivity Management: A quick overview.



Signal Management & Autorouting
Complex network routings in graphical display depicting all elements partaking in the setup of a network connection including the AS-IS (green) as well as planned changes (blue).



Connectivity Management in the rack
Network connections within the central network hubs in datacenters and floor distributors in interactive graphics showing port utilization and cable connections (AS IS = green, planned changes = blue).



Geomaps for inside & outside plant cable management
The network infrastructure on maps and in 3D building models.

// UseCases: The questions the solution provides answers for!

Enterprise Connectivity Management



Advanced
Maturity
Level

Standard
Maturity
Level

Basic
Maturity
Level

Options

- **What network infrastructure in the sense of structured cabling do I operate?** All active & passive network infrastructure components: Routers, switches, repeaters, patch-panels, access points, copper & optical cable management, network outlets, leased-line WAN connections.
- **Where are these network infrastructure elements?** Geographically, organizationally, zonewise, inside plant within the buildings, outside plant on the campus
- **How do I identify these active & passive network infrastructure units?** Serial #, internal inventory #, label generation and identification for cable connections
- **How is the logical network structure operated on that physical layer?** Logical connections, IP network and subnet structures, VLANs,...
- **What reserve capacity is available at any point within the network?** Assigned and freely available port capacity at any switching point within the network.
- **For whom are these network structures operated?** Subsidiary company, department, team, responsible manager,...
- **What are the configurations of the active network infrastructure devices?** Main device, manufacturers, models, network cards,...
- **What lifecycle phase are those network devices in?** Maintenance contract coverage, manufacturer support, end-of-life activities,...
- **What amounts of reserve devices and spareparts do I have in which inventory?**

// UseCases: The scenarios the solution supports

Enterprise Connectivity Management



Advanced
Maturity
Level

Standard
Maturity
Level

Basic
Maturity
Level

Options

- **Perform state-of-the-art Asset Management for all network infrastructure-related IT assets and exert full lifecycle control.**
- **Initial network infrastructure-related landscape inventory buildup:** Document an unknown or badly documented situation with initial inventorization (barcode scanning integration, autodiscovery data integration, classic manual inventory approaches)
- **Post merger application & server infrastructure inventory data consolidation:** Integrate and merge data from multiple inventories after taking over new organizations
- **Network infrastructure-related landscape operation optimization:** Get an insight and identify obsolete connections, analyze port allocation and free up port reserves, optimize routings
- **Network infrastructure technology changes & extensions:** Prepare and plan for as well as monitor progress of replacing a copper based network infrastructure with optical networks, plan network extensions for new floors, buildings and campuses
- **Single source of truth for all network infrastructure technology inventory issues:** Support constant inventorization, manage spare part reserves, easily maintain a perfect and up-to-date database for all helpdesk & ticketing systems, all ERP Financial Asset Mgmt and Procurement solutions, compliance management systems, provide essential base data for chargebacks...
- **Desaster & crisis support:** Prepare and have contingency plans for unforeseen events by ensuring that the overall network infrastructure setup has sufficient redundancy & fallback options integrated. Be able to respond to e. g. severe damages to the network infrastructure e. g. when disaster during construction work occurs and important connections or nodes are damaged or obliterated.



// **FNT Solutions for Enterprise IT Infrastructure:
DC Infrastructure Management**

// Datacenter Infrastructure Management: A quick overview.



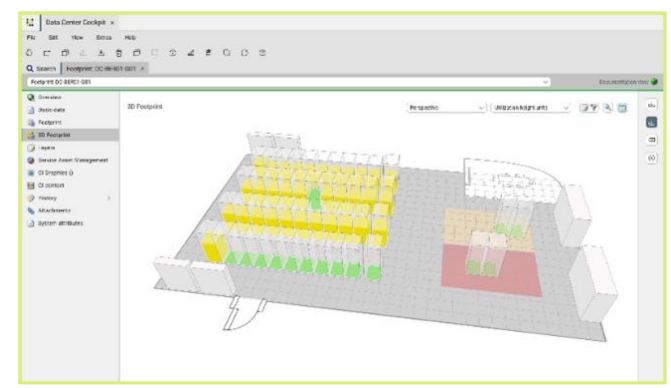
2D Footprint of the datacenter

„Populate the floor!“ – Document DC layouts, plan and control execution out racks, define zones.



3D Footprint of the datacenter

Navigate the datacenter structure in full interactive 3D to gain crucial insights into the layout including the Z axis.



Datacenter capacity management

Plan ahead per rack and avoid stranded capacity taking into consideration all 4 variables of space, power, cooling and network availability.

// UseCases: The questions the solution provides answers for!

DC Infrastructure Management



Advanced
Maturity
Level

(correlates to DC maturity level 4)

Standard
Maturity
Level

(correlates to DC maturity level 3)

Basic
Maturity
Level

(correlates to DC maturity level 2)

Options

- **What datacenter locations do I have and how are they structured:** Type (core datacenter, failover location, edge site), tier classification (redundancy level), building type, cooling technologie, power sources/power grid connection type, power technologie, raised floor vs concrete slab, usage of prefab/modular setup and enclosures vs. individual layout.
- **What does my actual datacenter setup & layout look like?** Arrangement of rack rows, traffic zones, reserved spaces for intermediate equipment storage, cold aisle-hot aisle arrangements, greyspace equipment for power generation & distribution as well as cooling infrastructure equipment (chillers, fans,...).
- **How are my space, power & cooling capacities used and what reserves do I have?** Total and per rack reserves of in-rack space (free height units), in-rack cooling capacity, in-rack power capacity
- **How do I manage extensions & changes in the power domain in the DC?** Manage the power chain, manage breakers and threshold values, compare actual values versus plan values
- **How do I manage extensions & changes in the network domain in the DC?** Structured cabling, backbone layout & setup, patch management including intelligent patching solutions (AIM).
- **How are my datacenters interconnected?** Providers, contracts, capacity, verified & certified true redundancy, own cable vs dark fiber.
- **What lifecycle phase are my datacenter assets in?** Asset tracking, maintenance contract coverage, manufacturer support, end-of-life activities
- **What amounts of reserve devices and spareparts do I have in which inventory?**

// UseCases: The scenarios the solution supports

DC Infrastructure Management



Advanced
Maturity
Level

(correlates to DC maturity level 4)

Standard
Maturity
Level

(correlates to DC maturity level 3)

Basic
Maturity
Level

(correlates to DC maturity level 2)

Options

- **Perform state-of-the-art Asset Management for all datacenter infrastructure-related IT assets and exert full lifecycle control.**
- **Populate the floor of new datacenter sites:** Plan & optimize actual space usage & the rollout of racks within the guidance & limits of the datacenter design criteria. Plan the population of racks and buildup of the DC internal network optimized in regard to the overall capacity limits.
- **Migrate & consolidate datacenter sites:** Better prepare migrations of infrastructure into a consolidated datacenter by having a detailed overview of all datacenters to be consolidated.
- **Single source of truth for all datacenter infrastructure technology inventory issues:** : Support constant inventORIZATION, manage spare part reserves, easily maintain a perfect and up-to-date database for all helpdesk & ticketing systems, all ERP Financial Asset Mgmt and Procurement solutions, compliance management systems, provide essential base data for chargebacks...
- **Safe operations assurance:** Monitor safe operations conditions, initiate the execution & document results of maintenance activities e. g. annual breaker trip testing, fire alarm system & suppression system checks.
- **Datacenter infrastructure technology refresh:** Salways have up-to-date and detailed information input for planning technology changes e. g. switch from individual servers to blade server technologie, switch from air-cooling to liquid cooling, etc.
- **Desaster & crisis support:** Prepare and have contingency plans for unforeseen events by ensuring that the overall DC infrastructure setup has sufficient redundancy & fallback options integrated. Be able to respond to e. g. severe damages to the DC infrastructure e. g. when disaster during construction work occurs or natural desasters are impeding operations.

FNT

// Thank you!

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