Unified Domain Center
A Bridge to 5G Profitability

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Turn Up the Focus on Enterprise

Sources of New Operator Revenues For 5G

- **Enterprises (e.g. B2B, B2B2C)**
  - Most Important: 20%
  - Second: 6%
  - Third: 6%
  - Least Important: 3%
  - Total: 69%

- **Consumer (e.g. B2C)**
  - Most Important: 34%
  - Second: 9%
  - Least Important: 3%
  - Total: 23%

- **Online (e.g. A2P)**
  - Most Important: 40%
  - Second: 17%
  - Least Important: 9%
  - Total: 17%

- **Governments (e.g. B2G, B2G2C)**
  - Most Important: 26%
  - Second: 40%
  - Third: 17%
  - Least Important: 3%
  - Total: 14%

Source: GSMA Survey of Operators
Which of the following are the key benefits of 5G to the service providers?

[Polar bar chart showing the percentage of respondents who picked each benefit.]

- Increased ARPU: 13%
- Increased speed across the network: 38%
- Reduced latency: 60%
- Enhanced wireless broadband: 53%
- Reduced costs: 25%
- Greater collaboration with verticals on business applications: 44%
- Connection density: 38%
- Faster deployment of new services: 38%
- Assistance with the transformation to a digital business: 27%

Source: TelecomTV 5G Evolution Survey 2018
From Cisco Conducted Enterprise Survey:

Q42. If you could extend your enterprise network policies across SP cellular network, what would be the top 2 services that you would pay a premium for (for your enterprise mobile and IoT endpoints)?

Enterprise would pay premium in order to extend their control of their network to the carrier network.

Services in order of selection when Enterprise Network policies are extended across SP cellular network (%):

- Segmentation (VLAN’s): 21%
- Content filtering: 19%
- Access network selection: 9%
- QoS / QoE: 14%
- Malware / AV & traffic detection: 37%

Market Pulse:

Agility | Extending Enterprise Policy | Transparency in SLA
What the Enterprise Wants?

Control – Visibility – Secure

Build versus managed service

Easy and flexible management everywhere

Enablement to use the Mobile-WAN like their LAN
Cisco Unified Domain Center

creating the mobile enterprise

UDC enables the SP to put enterprises in charge of their own 5G domain.

the service provider benefits from increased customer satisfaction, loyalty, and new revenues while integrity of the network is preserved

the enterprise deploys 5G services as an extension of their own network and accelerates digitization strategies for productivity and growth
Critical Mobile Capabilities for Enterprise 5G

- Mobility Specific Security
- QOE Priority & Control
- Multi Access Identity MGMT
- Billing & Massive Data MGMT
- Policy Setting, Enforcement, & Assurance
- Mobile Service Grouping (Private Mobility Network)
- Smart Cloud & SLA based Slice Selection
Examples of Unified Domain Center Value
Potential new service creation opportunities for Enterprises

Manufacturing
- Deterministic networking for flexible manufacturing pods delivering better asset utilization

Healthcare
- Remote patient monitoring sustaining better visibility into a public network creating better patient care

Retail
- Construct a rich-content retail network, tailored for the retailer Lifecycle from advertising to product selection and purchase

Agriculture
- Extending the stretch of networks into the food production supply chain is assured from the field into the shopping basket

Automotive
- The automotive vertical is digitizing itself and needs a platform to improve cross-industry efficiency

Finance
- Complimenting the smart device application with immersive collaboration and security to deliver on-demand customer intimacy
Case Study: XYZ Manufacturing Corp
SP Enabled Factory Automation

Enterprise Domain
- DNA-C

Enterprise Network

Mobile Operator Network
- Unified Domain Center

API
- Policy
- Assurance
Extending Intent-Based Networking

- Secured seamless mobile coverage
- Custom classes of SLA & QoS
- GEO fencing and location policies
- Automated asset tracking
- Automated version management for mobile end-points
- Group-based telemetric and automated alerts
<table>
<thead>
<tr>
<th>Unified Domain Center features for Service Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-tenant software platform enables enterprise to tailor use cases</td>
</tr>
<tr>
<td>Enables MNO control of time-to-market and feature differentiations</td>
</tr>
<tr>
<td>Protects MNO network functions via verification of enterprise changes</td>
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<tr>
<td>Leverages 4G and 5G functions</td>
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<tr>
<td>Open APIs offer enterprises different capabilities as a service (NaaS)</td>
</tr>
<tr>
<td>Verification and protection of core functions</td>
</tr>
<tr>
<td>Create valuable information through advanced analytics and processing</td>
</tr>
<tr>
<td>Charging &amp; auditing functions for monetization and support</td>
</tr>
</tbody>
</table>
Customizable Policy

Enterprise

Conditions
- Location
- Home/roaming
- Application
- Time of day
- Device type

Actions
- Blocking
- Redirecting
- Reporting
- Throttle
- QoS
- Usage monitoring
- Notification

Assurance
- Connection
- Location
- App usage
- Roaming
- Policy (applied)
- Audit
Show time.
Extending Intent-Based Networking

Enterprise Domain

DNA-C
- Multi-Access
- Campus/Branch
- SD-WAN

Fastlane
IP QoS
SD-WAN QoS

API
Policy
Assurance

Cisco Unified Domain Center
- Operator Admin Interface
- Customer Admin Portal
- QoE & Optimization
- Data Management
- Rule Manager
- Data Interfaces & Event Processing

RAN
- 5G
- LTE
- WiFi
- ULTRA VPC
- PCRF
- SON
- Other

Operator Domain
Extending Intent-Based Networking
Login
Enter your username and password.

Username

Password

Log In
Extending Intent-Based Networking

DNA-C
- Multi-Access
- Campus/Branch
- SD-WAN

Enterprise Domain
- Fastlane
- IP QoS
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API
Policy
Assurance

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Customer Admin Portal

RAN
- 5G
- 4G
- WiFi

Mobile Core Functions
- ULTRA VPC
- PCRF
- SON
- Other

Operator Domain
Login

Enter your enterprise ID, username and password.

Enterprise ID

Username

Password

Log In
Extending Intent-Based Networking

Enterprise Domain

DNA-C

Enterprise Network

SP Edge

Mobile Operator Network

Unified Domain Center

API

Policy

Assurance
Welcome, admin

In order to gather Assurance data and calculate your network health, we'll need to discover or import your network devices.

Overall Health Summary

As of Mar 4, 2019 4:30 pm

- Network Devices: --% Healthy Devices Last 24 Hours
- Wireless Clients: --% Healthy Clients Last 24 Hours
- Wired Clients: --% Healthy Clients Last 24 Hours

Network Snapshot

Network Devices: As of March 4, 2019 4:42 PM
- Unclaimed: 0
- Unprovisioned: 0
- Unreachable: 0

Network Profiles: As of Mar 4, 2019 4:42 PM
- 0