Licensing for Cisco DNA
Software Switching Subscription

Enterprise Networking
December 2018

Agenda

- Digital Network Architecture
- What is New
- Offer Structure & Pricing
- Migration & Ongoing Innovation
- Technical Support
- Resources

Digital Network Architecture

The network is the cornerstone of digital success or failure

Digital Disruption

1 Million Devices
Online Every Hour

Mobile, IoT, Cloud, AI/ML

Explosion of Data,
Lack of Insights

Complexity

$60B Spent of
Network Operations

95% Manual Operations

Customer Experience in a
Multi-cloud Environment

Security

Attack Surface

Threat Actors

Attack Sophistication

Network Challenges

Relevant Insights
at Scale

Slow and
Error Prone

Dynamic Threat
Landscape

Traditional Networks cannot meet the demands of a Digital Network

HQ			
ACL 1	ACL 2		
VLAN 1	VLAN 2	VLAN 3	

WAN

Remote

VLAN 2

Branch A

ACL 2

VLAN 1

Branch A

ACL 3

VLAN 3

Setting Up
End-End **Security**

Enabling Seamless
Mobility

Users, Device and
IOT Segmentation

Secure Connectivity
to the **Cloud**

Customer requirements for digital-ready network

Gain visibility & insights with context to inform business decisions
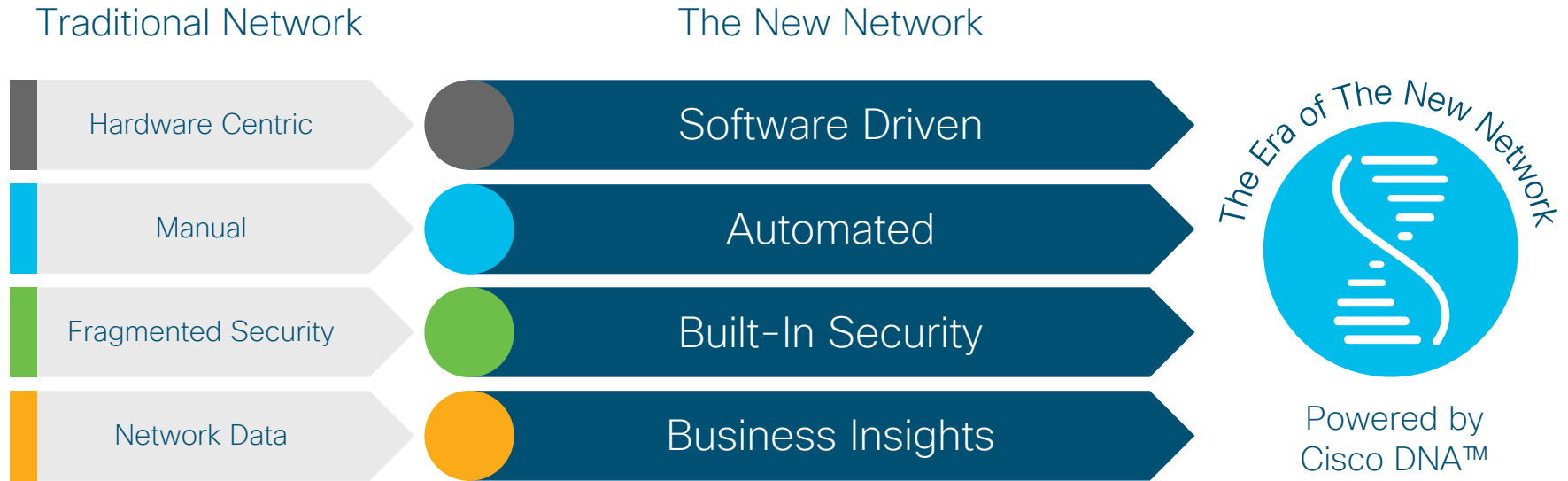
Increase automation for speed, scale, and accuracy

Ensure security & compliance with real-time threat defense

Insights & experiences

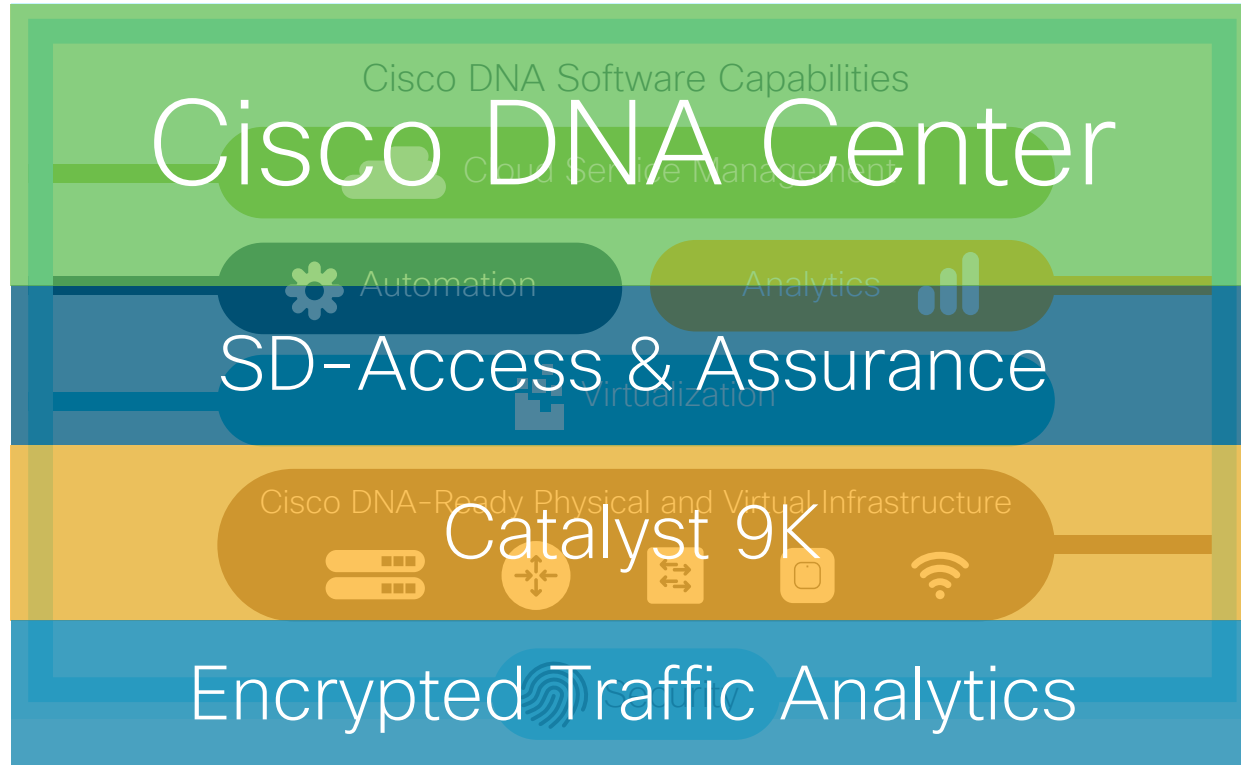Automation & Assurance

Security & compliance

Cisco Is Rewriting the Network Playbook

Traditional Network

	The New Network
Hardware Centric	Software Driven
Manual	Automated
Fragmented Security	Built-In Security
Network Data	Business Insights

The Era of The New Network

Powered by Cisco DNA™

What is New

Digital Network Architecture – What's New

Cisco DNA Software Capabilities

Cloud Service Management

Automation

Analytics

Virtualization

Cisco DNA-Ready Physical and Virtual Infrastructure

Cisco DNA Center

SD-Access & Assurance

Catalyst 9K

Encrypted Traffic Analytics

Software-Defined Access

Identity-based Policy & Segmentation

Decoupled security policy definition from VLAN and IP Address to enable rapid policy updates

Workflow-based Automation

Workflows for Network Design, Provision, and Operations across Wired and Wireless provide consistency at scale
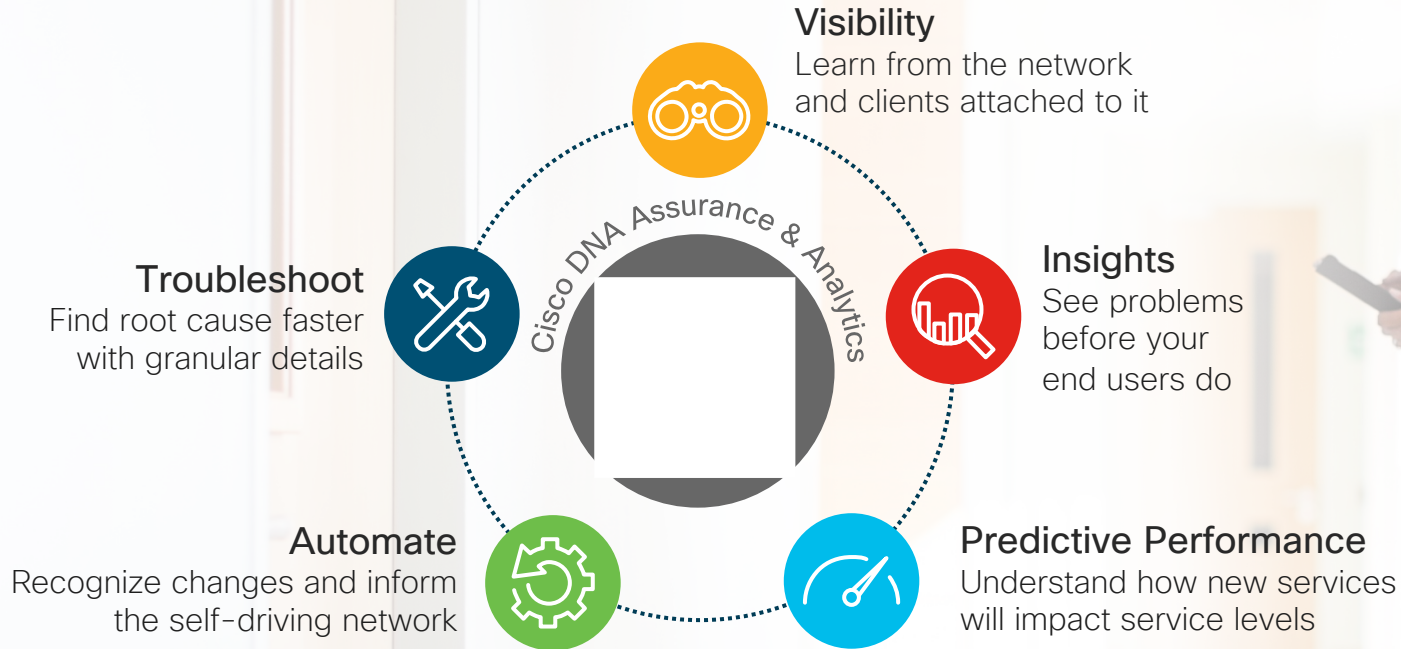
Insights & Telemetry

Analytics and insights into User and application behavior for proactive issue identification and resolution

Industry's first policy-based automation from the Access to the Cloud

Applied Intelligence with Cisco DNA Assurance
Converting Data to Business and IT Insights

Visibility
Learn from the network and clients attached to it

Insights
See problems before your end users do

Troubleshoot
Find root cause faster with granular details

Cisco DNA Assurance & Analytics

Predictive Performance
Understand how new services will impact service levels

Automate
Recognize changes and inform the self-driving network

Industry's First Self-Predicting Network Analytics Platform

Encrypted Traffic Analytics
Enhanced Network-as-a-Sensor

- Analyze netflow metadata without decrypting traffic flows

- Global-to-local knowledge correlation - 99.99% threat detection accuracy

- Encrypted traffic analytics from Cisco's newest switches and routers

Encrypted Traffic

Non-Encrypted Traffic

Security with Privacy

The New Catalyst 9K

| Integrated Security	Mobility Ready	IoT Ready	Cloud Ready
Find and contain threats fast with real-time monitoring	Simplify BYOD onboarding	Instantly on-board IoT devices	Build apps. Through programmability
Threat detection for encrypted traffic	Manage and secure wired and wireless from one device	Automatically segment IoT traffic for better security	Improve applications performance - user to cloud
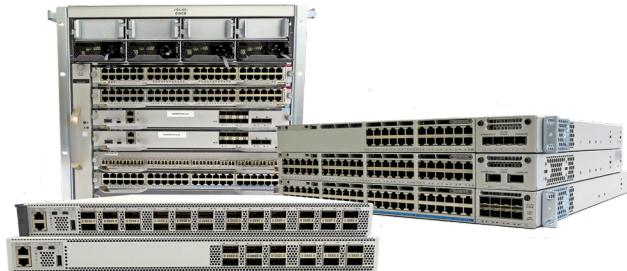
Future-Proofed with UADP 2.0
and open and programmable IOS-XE

Cisco DNA Center: Design, Policy, Provision, Assurance
A better way to manage your network

Logical workflow to design, provision, set policy
Respond to changes faster
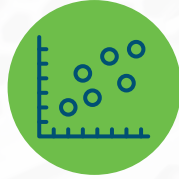
Monitor end-to-end network performance
Predict and act on problems before they happen

Pinpoint problems faster
Reduce downtime with an end-to-end view instead of hop by hop

Manage hardware and software lifecycles
Keep up to date, meet compliance and plan for refresh

cisco
DNA Center

Cisco DNA Center: Design, provision, automate policy and assure services from one place

Introducing Cisco DNA Software Subscription for Switching

Introducing: Switching Subscription Offer

Simple Predefined Offers

Enable All Cisco DNA Capabilities

Better together Pricing

Investment Protection

Why Subscription Matters to Customers

Faster Access to Innovation
Be More Competitive

- Frequent Access to Latest Features
- Up-to-date Security Protection
- Software Refresh Independent of Hardware

Enhanced Agility
Respond to the Market Faster

- Renew & Scale What You Want
- Better License Portability
- Shorter Planning Cycles

Better Financial Planning
Optimize your IT Spend
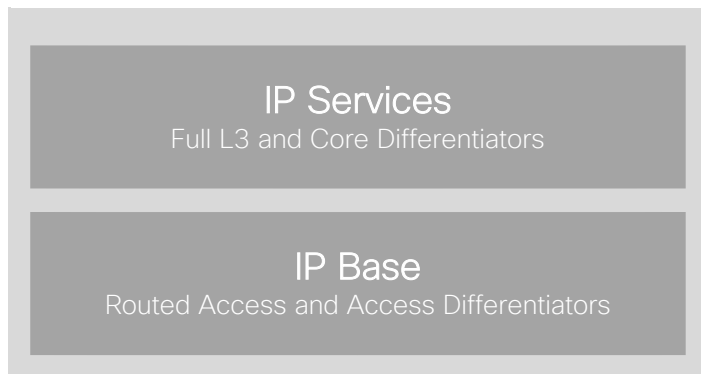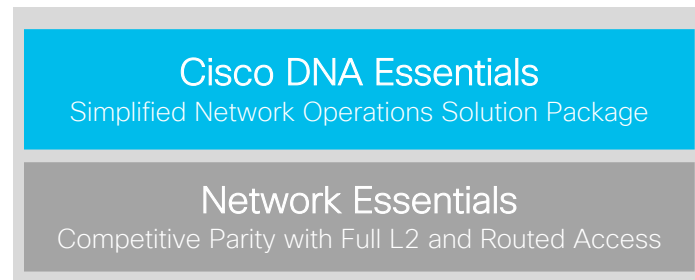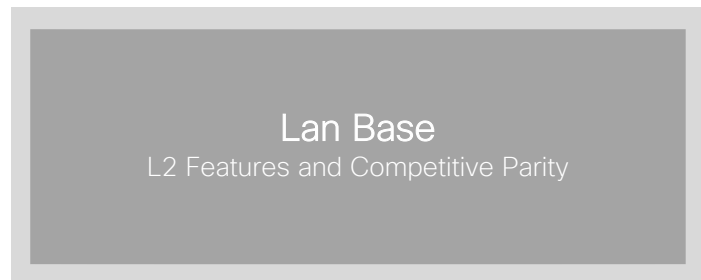
- Linear, Predictable Budget Spend
- CapEx to OpEx Shift
- Keep Vendors on Their Toes

Catalyst 9K: Simplified packaging

Current three-tier packaging

IP Services
Full L3 and Core Differentiators

IP Base
Routed Access and Access Differentiators

Lan Base
L2 Features and Competitive Parity

Simplified two-tier packaging

Cisco DNA Advantage
Software Defined Access, Assurance and ETA Solution Package

Network Advantage
Full L3 with flexible Segmentation and Network Resiliency

Cisco DNA Essentials
Simplified Network Operations Solution Package

Network Essentials
Competitive Parity with Full L2 and Routed Access

Cisco DNA subscriptions required (min 3-year term) at time of Cat 9K order

Switching: Offer Structure

Cisco DNA **Premier**

PREFERRED

Single SKU — 3/5/7 Year Subscriptions

| Stealthwatch |
| ISE Base + ISE Plus |
| Cisco DNA **Advantage** |
| Cisco DNA **Essentials** |

Cisco DNA **Advantage**

Single SKU — 3/5/7 Year Subscriptions

| Cisco DNA **Advantage** |
| Cisco DNA **Essentials** |

Cisco DNA **Essentials**

Single SKU — 3/5/7 Year Subscriptions

| Cisco DNA **Essentials** |

Catalyst 9K with **Network Essentials**
(Layer 2 Routed Access)

Catalyst 9K with **Network Advantage**
(Full Layer 3 Routing)

Cisco Software Support Service (SWSS) included in all subscriptions
Must Attach Cisco DNA Premier, Cisco DNA Advantage or Cisco DNA Essentials as Subscription with 9K

Customer Journey to Intent Based Networks

Centralized Management

- Zero touch deployment
- Day 0 and Day 2 provisioning
- Layer 2 routed access
- Software Image Management
- Discovery, Inventory, Topology

Automation

- Advanced Secured segmentation
- SDA

- SD-Access capable*
- Flexible network segmentation
- Application Policy
- DNA service for Bonjour
- Third party app hosting

- PnP
- LAN Automation
- Embedded Event Manager

Assurance & Analytics

- Network security analytics
- User/device context

- Global insights, trends
- Compliance, custom reports
- Switch 360 & wired client 360
- SD-Access & Switch insights
- Application health, application 360, performance (loss, latency, jitter)
- Guided remediation

- Health Dashboard – Network, client, application
- Switch & Wired client health monitoring
- Full Flexible NetFlow

Security

- Stealthwatch
- ISE Base+ISE Plus
- ETA
- Rapid Threat Contain

- ETA capable*
- Rapid threat contain*

Cisco DNA Premier

Cisco DNA Advantage

Cisco DNA Essentials

*additional software required

Cisco DNA Premier Offer Details

StealthWatch - 25 flows

ISE Base+ ISE Plus – 25 EP

Cisco DNA Advantage (Inclusive of Cisco DNA Essentials) 3,5,7 Year Terms

Advanced Automation
- SD-Access
- Application Policy
- Encrypted Traffic Analytics*
- DNA Service for Bonjour*
- Third-party App Hosting*

Element Management
- Patch Lifecycle Management

Assurance & Analytics
- Global Insights, Trends,
- Compliance, Custom Reports
- Switch 360 & Wired Client 360
- SD-Access and Switch Insights
- Application Health, Application 360, Performance (Loss, Latency, Jitter)

Telemetry & Visibility
- ERSPAN*
- AVC (NBAR2)*
- Wireshark*

Network Advantage (Inclusive of Network Essentials) Perpetual

Enhanced Security Controls
MACsec-256*

IoT & Mobility
CoAP*, AVB*, PTP*

Full Routing Functionality
BGP*, HSRP, OSPF, ISIS,GLBP*

Flexible Network Segmentation
VRF, VXLAN, LISP, SGT, MPLS*

High Availability & Resiliency
NSF*, GIR, Stackwise Virtual*+, ISSU/eFSU*, Patching (CLI)

Optimize Bandwidth Utilization with Multicast
MSDP, mVPN*, AutoRP

* Not available on Catalyst 9200 Series Switches   +Catalyst 9400/9500 Series switches

Single SKU

Cisco DNA Premier

3 / 5 / 7 year subscription

Stealthwatch – 25 flows

ISE Base + ISE Plus – 25 EP

Cisco DNA Advantage
(inclusive of Cisco DNA Essentials)

Catalyst 9K OR existing platforms with Network Advantage

Catalyst 9300/9500 includes 25 flows/endpoints for Stealthwatch/ISE
Catalyst 9400 includes 100 flows/endpoints for Stealthwatch/ISE
Customer can purchase additional flows/end points in the increments of 25 (maximum of 3)

Enables all Cisco DNA Use Cases including SDA & ETA

Cisco DNA Advantage Offer Details

Cisco DNA Advantage (Inclusive of Cisco DNA Essentials) — 3,5,7 Year Terms

Advanced Automation
- SD-Access
- Application Policy
- Encrypted Traffic Analytics*
- DNA Service for Bonjour*
- Third-party App Hosting*

Assurance & Analytics
- Global Insights, Trends,
- Compliance, Custom Reports
- Switch 360 & Wired Client 360
- SD-Access and Switch Insights
- Application Health, Application 360, Performance (Loss, Latency, Jitter)

Element Management
- Patch Lifecycle Management

Telemetry & Visibility
- ERSPAN*
- AVC (NBAR2)*
- Wireshark*

Network Advantage (Inclusive of Network Essentials) — Perpetual

Enhanced Security Controls
MACsec-256*

Flexible Network Segmentation
VRF, VXLAN, LISP, SGT, MPLS*

IoT & Mobility
CoAP*, AVB*, PTP*

High Availability & Resiliency
NSF*, GIR, Stackwise Virtual*+, ISSU/eFSU*, Patching (CLI)

Full Routing Functionality
BGP*, HSRP, OSPF, ISIS,GLBP*

Optimize Bandwidth Utilization with Multicast
MSDP, mVPN*, AutoRP

* Not available on Catalyst 9200 Series Switches   +Catalyst 9400/9500 Series switches

Cisco DNA **Advantage**

3 / 5 / 7 year subscription

**Cisco DNA Advantage
(Inclusive of Cisco DNA Essentials)**

Catalyst 9K OR existing platforms with Network Advantage

Customer need to buy ISE & Stealthwatch to Enable Full Cisco DNA Capability

Cisco DNA Essentials Offer Details

Cisco DNA Essentials

3,5,7 Year Terms

Basic Automation
- PnP Application
- LAN Automation
- Embedded Event Manager

Basic Assurance
- Health Dashboards – Network, Client, Application
- Basic Switch & Wired Client Health Monitoring

Element Management
- Software Image Management
- Discovery, Inventory, Topology

Telemetry
- Full Flexible NetFlow

Network Essentials

Perpetual

Essential Switch Capabilities
Layer 2,
Routed Access(RIP, EIGRP Stub, OSPF (1000 routes)),
PBR, PIM Stub Multicast (1000 routes)
PVLAN, VRRP, PBR, CDP, QoS,
FHS, 802.1x, MACsec-128, CoPP,
SXP, IP SLA Responder
SSO*

DevOps Integration
- NETCONF, RESTCONF, gRPC*
- Yang Data Models
- GuestShell (On-Box Python)*
- PnP Agent, ZTP*

Telemetry & Visibility
- Model-driven Telemetry
- Sampled NetFlow
- SPAN,RSPAN

Single SKU

Cisco DNA **Essentials**

3 / 5 / 7 year subscription

Cisco DNA Essentials

Catalyst 9K OR existing platforms with Network Essentials

Enable Base Automation & Monitoring in Cisco DNA Center

Catalyst 9000 Switches – Advantage vs. Essentials

C9200, C9300, C9400, C9500

Advantage

Cisco DNA Advantage (Inclusive of Cisco DNA Essentials) — 3,5,7 Year Terms

Advanced Automation
- SD-Access
- Application Policy
- Encrypted Traffic Analytics*
- DNA Service for Bonjour*
- Third-party App Hosting*

Assurance & Analytics
- Global Insights, Trends,
- Compliance, Custom Reports
- Switch 360 & Wired Client 360
- SD-Access and Switch Insights
- Application Health, Application 360, Performance (Loss, Latency, Jitter)

Element Management
- Patch Lifecycle Management

Telemetry & Visibility
- ERSPAN*
- AVC (NBAR2)*
- Wireshark*

Network Advantage (Inclusive of Network Essentials) — Perpetual

Enhanced Security Controls
MACsec-256*

Flexible Network Segmentation
VRF, VXLAN, LISP, SGT, MPLS*

IoT & Mobility
CoAP*, AVB*, PTP*

High Availability & Resiliency
NSF*, GIR, Stackwise Virtual*+, ISSU/eFSU*, Patching (CLI)

Full Routing Functionality
BGP*, HSRP, OSPF, ISIS,GLBP*

Optimize Bandwidth Utilization with Multicast
MSDP, mVPN*, AutoRP

Essentials

Cisco DNA Essentials — 3,5,7 Year Terms

Basic Automation
- PnP Application
- LAN Automation
- Embedded Event Manager

Basic Assurance
- Health Dashboards – Network, Client, Application
- Basic Switch & Wired Client Health Monitoring

Element Management
- Software Image Management
- Discovery, Inventory, Topology

Telemetry
- Full Flexible NetFlow

Network Essentials — Perpetual

Essential Switch Capabilities
Layer 2,
Routed Access(RIP, EIGRP Stub, OSPF (1000 routes)),
PBR, PIM Stub Multicast (1000 routes)
PVLAN, VRRP, PBR, CDP, QoS,
FHS, 802.1x, MACsec-128, CoPP,
SXP, IP SLA Responder
SSO*

DevOps Integration
- NETCONF, RESTCONF, gRPC*
- Yang Data Models
- GuestShell (On-Box Python)*
- PnP Agent, ZTP*

Telemetry & Visibility
- Model-driven Telemetry
- Sampled NetFlow
- SPAN,RSPAN

- Catalyst 9000 switching HW **includes** the **Perpetual** Network Stack - **Network Essentials or Network Advantage**
- **Mandatory** to **attach Cisco DNA License** when ordering Catalyst 9000 switches
- DNA License **includes Switch and DNA Center Features**

* Not available on Catalyst 9200 Series Switches   +Catalyst 9400/9500 Series switches

Current-Gen Catalyst - Advantage vs. Essentials

C2K,CDB, C3K,C4K,C6K

Advantage	Essentials

Cisco DNA Advantage (Inclusive of Cisco DNA Essentials) — 3,5,7 Year Terms

Advanced Automation
- SD-Access*
- Application Policy*
- DNA Service for Bonjour*

Assurance & Analytics
- **Global Insights, Trends**
- **Compliance, Custom Reports**
- Switch & Wired Client 360
- SD-Access* and Switch Insights
- Application Health, Application 360*, Performance* (Loss, Latency, Jitter)

Element Management
- Patch Lifecycle Management

Cisco DNA Essentials — 3,5,7 Year Terms

Basic Automation
- PnP Application
- LAN Automation

Basic Assurance
- Health Dashboards – Network, Client, Application
- Basic Switch & Wired Client Health Monitoring

Element Management
- Software Image Management
- Discovery, Inventory, Topology

*Not supported on all platforms or Caveats Apply. Refer to Product Datasheet for details

- Existing Network Stack remains unchanged and is Perpetual.
- Cisco DNA Essentials/Advantage and C1 Advantage is Term-based (3,5,7-yr). Optional attach when ordering HW.
- Cisco DNA licenses don't contain any Switch Features for Existing Catalyst families.

Customers Software Defined Access Journey

Advanced Security

Essential Switch Capabilities, Basic Automation & Monitoring

Full L3, Policy based Automation & Assurance

Secured Segmentation, Advanced Security

Layer 2, Routed Access

IPV6 Tunnel Capabilities, PnP, Netflow

Easy QoS Monitoring, Client/Device 360

Full Netflow, image and patch management

Flexible Network Segmentation

Full Routing Capability

SDA

ETA, MUD

ISE, Stealth Watch

Cisco DNA Essentials

Cisco DNA Advantage
(SDA Capable)

Cisco DNA Premier
(SDA Ready)

Partner Value Add Opportunity at Every Step

Pricing

Catalyst 9K Priced Right
Delivering More Value
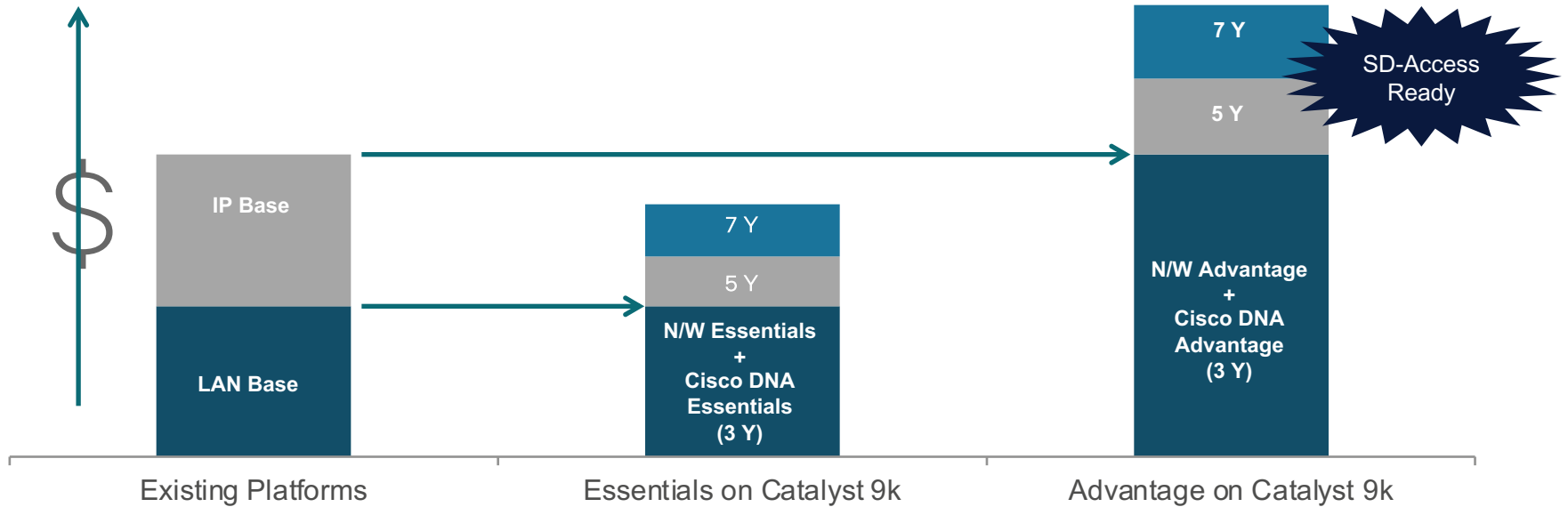
5-Year Hardware & Software TCO Comparison
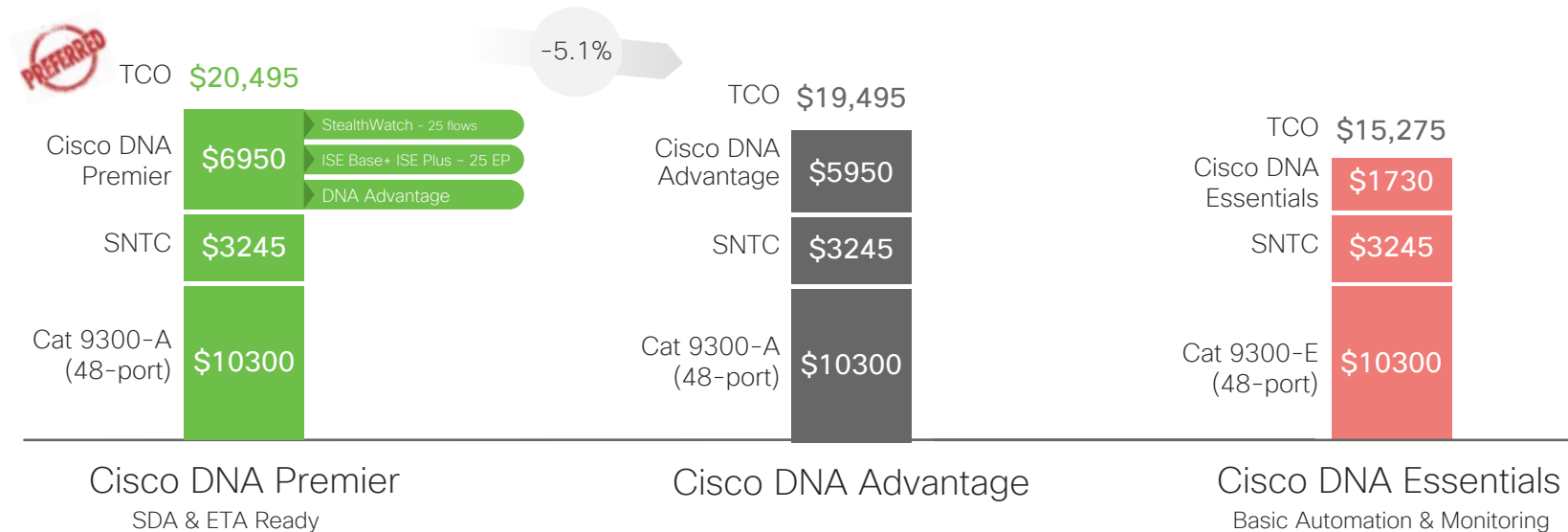
PREFERRED

-5.1%

	Cisco DNA Premier	Cisco DNA Advantage	Cisco DNA Essentials
TCO	$20,495	$19,495	$15,275

Cisco DNA Premier — $6950
- StealthWatch - 25 flows
- ISE Base+ ISE Plus – 25 EP
- DNA Advantage

SNTC — $3245

Cat 9300-A (48-port) — $10300

Cisco DNA Advantage — $5950

SNTC — $3245

Cat 9300-A (48-port) — $10300

Cisco DNA Essentials — $1730

SNTC — $3245

Cat 9300-E (48-port) — $10300

Cisco DNA Premier
SDA & ETA Ready

Cisco DNA Advantage

Cisco DNA Essentials
Basic Automation & Monitoring

Additional flows in the increment of 25 can be purchased

Deploy SDA, Assurance and ETA with Cisco DNA Premier for a 5% Price Premium

3-Year Hardware & Software TCO Comparison

PREFERRED

TCO $16,797

-5.3%

TCO $15,947

TCO $13,347

Cisco DNA Premier	$4550	StealthWatch - 25 flows
		ISE Base+ ISE Plus – 25 EP
		DNA Advantage

Cisco DNA Advantage $3700

Cisco DNA Essentials $1100

SNTC $1947

SNTC $1947

SNTC $1947

Cat 9300-A (48-port) $10300

Cat 9300-A (48-port) $10300

Cat 9300-E (48-port) $10300

Cisco DNA Premier
SDA & ETA Ready

Cisco DNA Advantage

Cisco DNA Essentials
Basic Automation & Monitoring
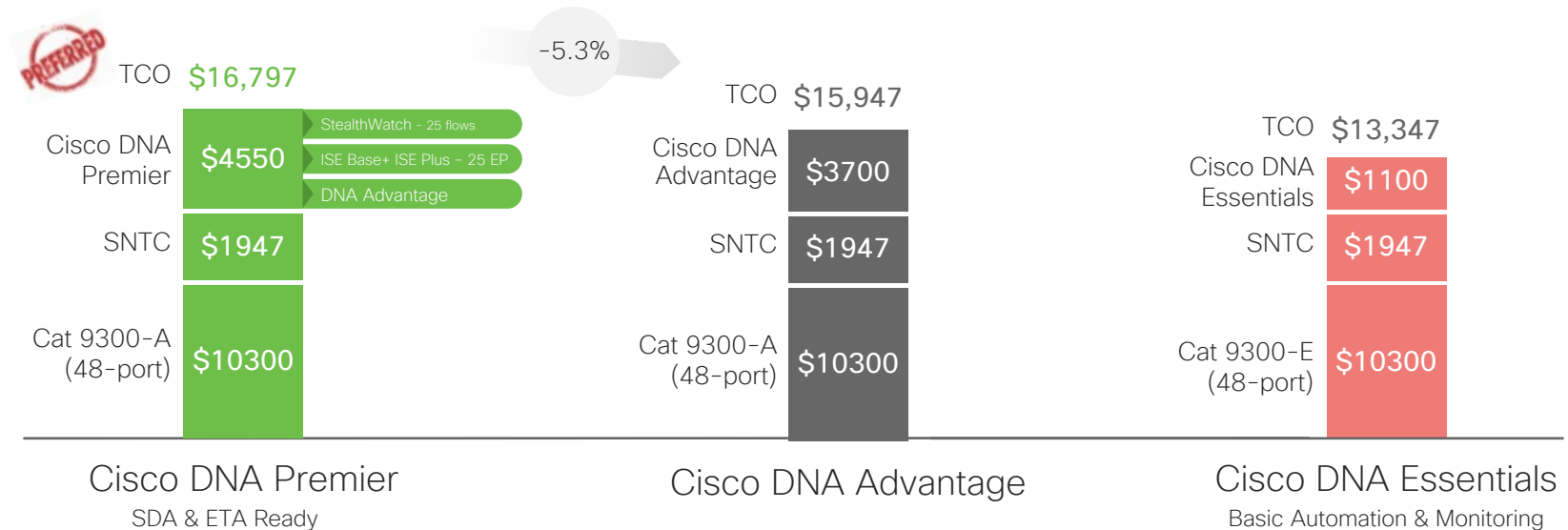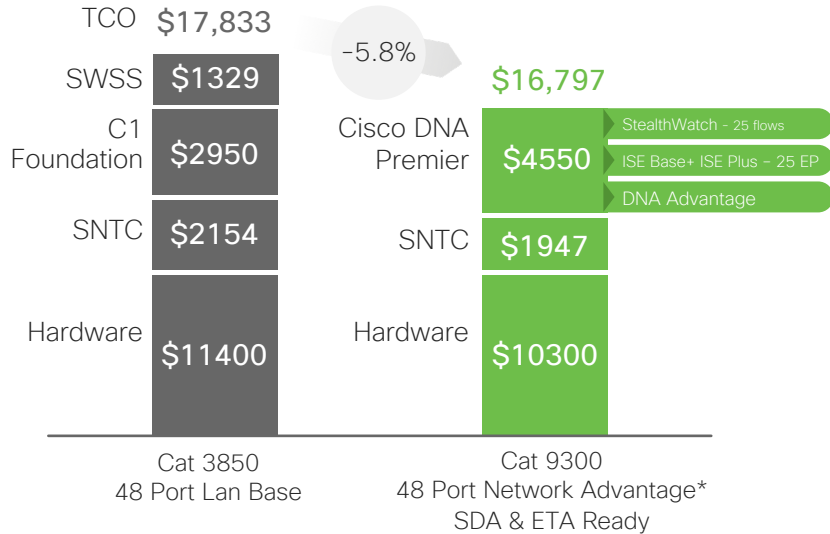
Additional flows in the increment of 25 can be purchased

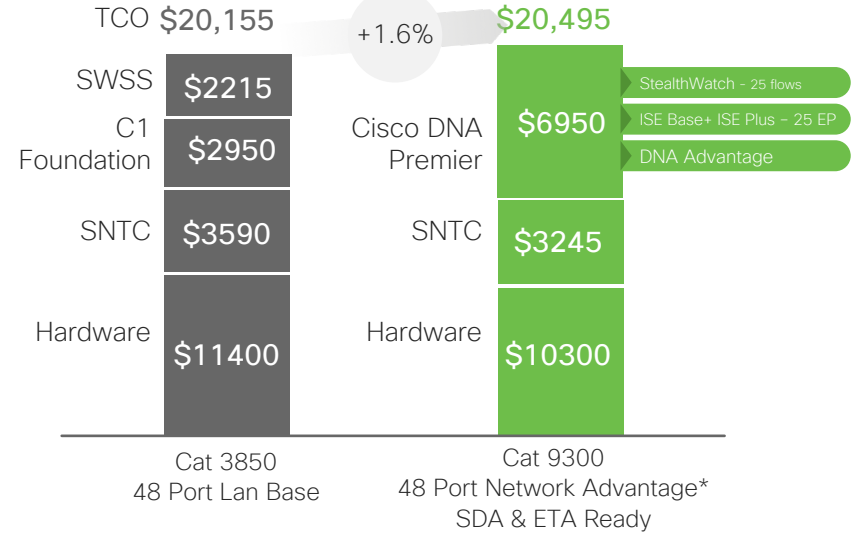Deploy SDA, Assurance and ETA with Cisco DNA Premier for a 5% Price Premium

Cisco ONE on Catalyst 3850 vs. 9300
Hardware & Software TCO comparison

3 Year

	Cat 3850 48 Port Lan Base		Cat 9300 48 Port Network Advantage* SDA & ETA Ready
TCO	$17,833	-5.8%	$16,797
SWSS	$1329		
C1 Foundation	$2950	Cisco DNA Premier	$4550 — StealthWatch - 25 flows / ISE Base+ ISE Plus – 25 EP / DNA Advantage
SNTC	$2154	SNTC	$1947
Hardware	$11400	Hardware	$10300

5 Year

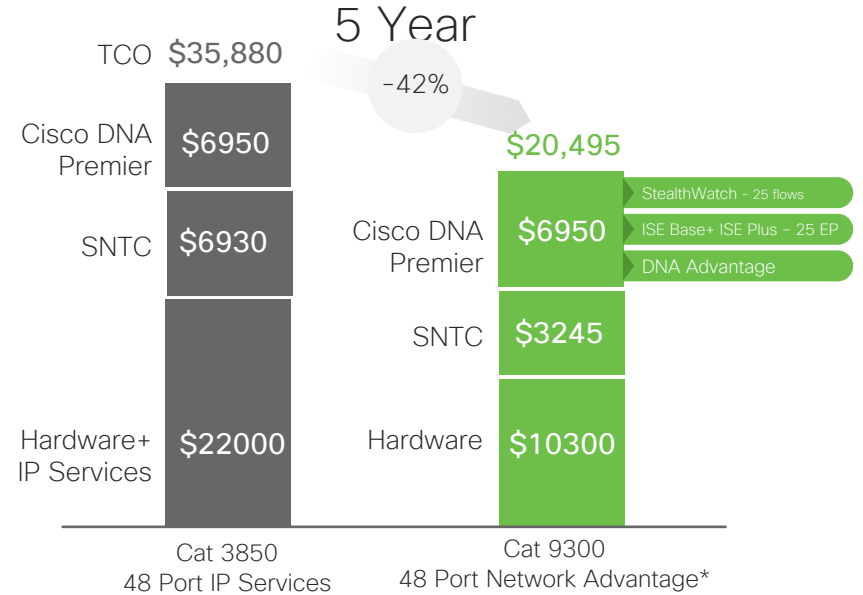|	Cat 3850 48 Port Lan Base		Cat 9300 48 Port Network Advantage* SDA & ETA Ready
TCO	$20,155	+1.6%	$20,495
SWSS	$2215		
C1 Foundation	$2950	Cisco DNA Premier	$6950 — StealthWatch - 25 flows / ISE Base+ ISE Plus – 25 EP / DNA Advantage
SNTC	$3590	SNTC	$3245
Hardware	$11400	Hardware	$10300

*Network Advantage is equivalent to IP Services
Additional flows in the increment of 25 can be purchased

Cisco DNA Premier on Catalyst 9K Offers More Value

SDA on Catalyst 3850 vs. 9300 with Cisco ONE
Hardware & Software TCO comparison

3 Year

TCO $30,708

-45%

Cat 3850 48 Port IP Services	
Cisco DNA Premier	$4550
SNTC	$4158
Hardware + IP Services	$22000

$16,797

Cat 9300 48 Port Network Advantage*		
Cisco DNA Premier	$4550	StealthWatch - 25 flows / ISE Base+ ISE Plus – 25 EP / DNA Advantage
SNTC	$1947	
Hardware	$10300	

5 Year

TCO $35,880

-42%

Cat 3850 48 Port IP Services	
Cisco DNA Premier	$6950
SNTC	$6930
Hardware+ IP Services	$22000

$20,495

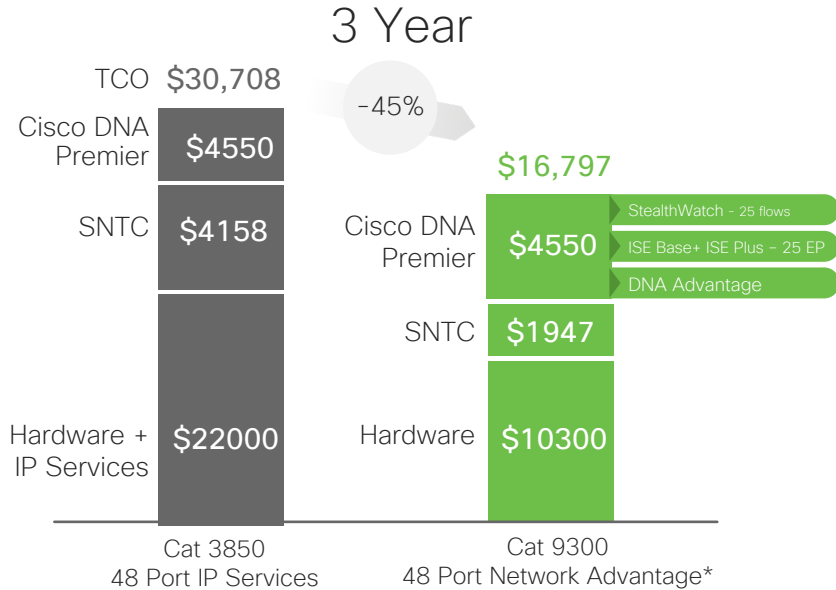| Cat 9300 48 Port Network Advantage*		
Cisco DNA Premier	$6950	StealthWatch - 25 flows / ISE Base+ ISE Plus – 25 EP / DNA Advantage
SNTC	$3245	
Hardware	$10300	

*Network Advantage is equivalent to IP Services
Additional flows in the increment of 25 can be purchased

Cisco DNA Premier on Catalyst 9K Offers 40%+ Savings