# Edge Orchestration & Control

Patton Cloud CSP-C2E Cloud to Edge Service Plan



Network orchestration, tools, and micro services powering Unified Communications and IoT at the Edge/customer premise.

- From The Cloud manage, monitor, secure, alert, troubleshoot, analyze and optimize services
- Automatically provision services and upgrade CPE devices to support new services
- Remotely and Securely control your access, networking and over-the-top (OTT) services at the network edge
- Easily Upload configurations and feature licenses to deliver value-added services
- Effortlessly Onboard new subscribers and deliver support and SLA services.
- Converge Delivery of new voice, data and network services
- Interoperate cloud telephony, onpremise PBX and end points.
- Integrate with third-party clouds and OSS/BSS platforms using the Patton Cloud API
- Select from a range of services for a low annual fee service levels.

ne Patton Cloud is a new and revolutionary service to accelerate and aid service providers and managed service organizations (MSOs) in making the transition to converged ALL-IP networking, IoT and telephony services.

Delivering these next generation services has presented significant challenges in terms of controlling costs while assuring quality, security, manageability and flexibility. These problems need to be addressed at the edge of the subscriber's network, especially when services are provided over-the-top. SIP Trunks, unified communications (UC), UC as a service (UCaaS) and the Internet of things (IoT) are all technically perplexing; services can be difficult to deploy with velocity, hard to secure and even more difficult to tailor to unique subscriber needs. Few Service Providers have the capability to solve these myriad of customer service issues. The net result is churn, long resolution times and expensive truck rolls. There is plenty of customer dissatisfaction and less "convergence" or "unification" of services expected by the market.

The Patton Cloud is exactly designed to solve these problems and improve the customer experiences while decreasing costs and improving provider profitability. The Patton Cloud-to-Edge Service Plans provide a centralized interface to manage, monitor, secure, alert, troubleshoot, analyze and optimize services by leveraging a SmartNode installed on the Customer

Premise. When a SmartNode is connected to the Patton Cloud it provides deep insights into what is happening with connectivity, networking, quality and services traversing the WAN and subscribers LAN network. It also provides views of device status, health, call loads and much more.

Now, with the Patton Cloud, you can easily deliver remote, real-time support leveraging insightful diagnostics available at the Edge using a SmartNode. The Patton Cloud provides remote configuration, zero touch provisioning, device health, monitoring, reporting, and troubleshooting, as well as mass software upgrades for efficient, cost-effective network orchestration.

The Patton Cloud also allows SmartNode devices to be controlled from the cloud for license and firmware management. That means any SmartNode CPE, powered by the Patton Cloud, can be scaled, transformed or re-purposed, by switching on new security protocols, routing protocols, TDM channels, SIP Sessions or NFV/SD WAN support.

Designed to integrate smoothly with existing network-management systems, processes, and workflows, the Patton Cloud uses a RESTful API. This means the services delivered by the Patton Cloud can be integrated with 3rd party clouds or OSS/BSS platforms.

Visit patton.com/cloud for more info.



# Patton Cloud<sup>™</sup> Cloud Service Plans (CSP)

### Typical Application

The Patton Cloud provisions, configures and manages devices, services and solutions at the edge or point of service demarcation. It enables proactive management of devices, device licenses and configurations from any device from any location. Debugging tools together with active monitors and event triggers allow Service Providers to

secure services and provides a means to proactively alert, troubleshoot, analyze, and optimize devices and the services delivered by and traversing the SmartNode. Cloud based License services empower Service Providers to proactively extend, update and upgrade services delivered to subscribers with just a few clicks.

#### **All-IP Migration & Transformation Edge Orchestration & Management** 3rd Party Web UI Clouds **Patton** Rest API **HTTPS** Web Server Cloud REST API HTTPS Rest API Server **Databases** License OSS/BSS Server Customer Management **NodeMS** System Server Notification Server **CDR** Analysis Server Secure Tunnel T1/E1, BRI, POTS 3G/4G/LTE Mobile TDM xDSL, Fiber, Any WAN Access Ethernet Secure Tunnel Analog or Network HQ or BRI Phone Analog Edge Network MSO or Fax Access and/or Service Demarcation **PSTN** Fallback **PSTN** SmartNode Service LAN Provider 11 / 111 - 10000000 SIP VolP Calls, Data & SIP Phones **Monitors** Data VPN Data IP PBX **Desktop SIP Client**

Services: Trunking, Hosted Voice & Data, Managed Services

# Patton Cloud™ Cloud Service Plans (CSP)

### Cloud Service Plans

The Patton Cloud offers different online service plans as described below.

# **BASIC**Dashboard

User/Role Management
Device on-boarding
Max of 5 Managed
Devices\*
Redirect Service
Status, Firmware, Uptime
Quick-Tools

#### **STANDARD**

Dashboard
User/Role Management
Device on-boarding
Unlimited Managed
Devices (includes 10\*)
Redirect Service
Status, Firmware, Uptime
Quick-Tools
Device CLI & Web
Terminal Access

License Server

Service Demarcation delivering

converged Voice & Data network

protection.

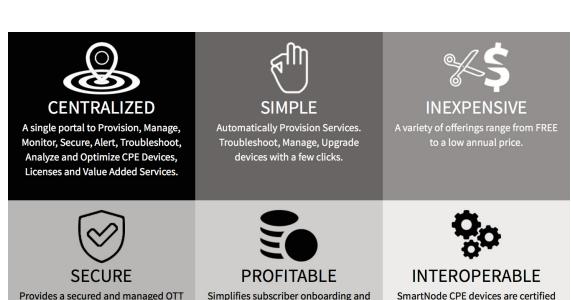
#### **ADVANCED**

Dashboard User/Role Management Device on-boarding **Unlimited Managed** Devices (includes 50\*) Redirect Service Status, Firmware, Uptime Quick-Tools Device CLI & Web **Terminal Access** License Server File Management, Backup & Restore Firmware management Provisionina Alarms & Notifications

#### **PROFESSIONAL**

Dashboard User/Role Management Device on-boarding **Unlimited Managed** Devices (includes 500\*) Redirect Service Status, Firmware, Uptime Quick-Tools Device CLI & Web **Terminal Access** License Server File Management, Backup & Restore Firmware management Provisionina Alarms & Notifications Multi-Tenant Operation API

### **Benefits**



the delivery of support and SLA

services. Provides a platform for sale

of additional licenses and new

services.

for use with all Softswitch, PBX and IP

Phone brands including Broadsoft,

3CX, Metaswitch and many more.

<sup>\*</sup> Devices purchased separately

# Patton Cloud<sup>™</sup> Cloud Service Plans (CSP)

### Specifications

#### Dashboard

Manage all your Trinity based Patton devices from a centralized dashboard. The initial dashboard provides an overview of connected device models, locations, status, and installed software.

#### User/Role Management

Set access rights for Users based on Role profiles such as Administrator, Operator, or Press Agency. Administrators have full access; Operators have Read-Only Access; Press Agency Access is for writers.

#### Device on boarding

Easily add devices to your organization in two easy steps:

- 1: Install Software release 3.12 or newer
- 2: Install your Organization's Key

### Device Status, Firmware and Uptime

Under the device tab you can easily monitor any specific device's online/offline status, firmware version, see how long it has been online, and manage installed and leased licenses.

#### Quick-Tools

These are available for each device. Instead of opening the device in the full view, you can simply use the quick tools to do basic actions

such as: open CLI terminal for the device, open the Web UI, Blink the LEDs on the device, check for any dropped calls, report a problem, update software, or reboot the device.

#### CLI & Web Terminal

From the device screen the user has full access to the CLI terminal or Web UI of each device, enabling remote support and troubleshooting.

#### License Server

Enables software and feature license management and distribution across devices within an organization. Unique is the ability to distribute a pool of licenses dynamically leased to particular devices.

#### **Provisioning Server**

Provides multiple mechanisms to enable Zero-touch provisioning including:

- Redirect, which request to an external configuration server.
- Connect, which activates the device to the cloud immediately, without the need for a reboot.
- Provide, which sends configuration files stored on the cloud drive without the need for any external configuration server

#### Health Monitoring

Monitor various key parameters of device health including

temperature, available memory, processor load

# Configuration Management, Backup & Restore

Basic Configuration
Management enables Patton
Cloud users to back-up and
restore device configuration
files from and to the devices
on the Patton Cloud:

Files (subscription required) Standard Plan and above.

- · Cloud-based file store
- Upload/download files
- View/edit files
- Share files publicly

File Backup/Restore (subscription required) Advanced Service Plan and above.

- File auto-versioning
- Track file changes
- Restore old file versions

File Synchronization (subscription required) Advanced Service Plan and above.

- Mirror device files to Cloud
- Two-way synchronization

#### Firmware Management

Basic Firmware Management enables Patton Cloud users to update or upgrade the devices on the Patton Cloud:

- Select Device
- Select firmware from Patton repository (upgrades.patton.com)
- Upgrade

#### Multi-Tenant

Separate multitenant network environments enabling administrators or service providers to provide a local view to a customer or department, but also provide a single management overview

#### API

REST based API to access Cloud-Smart from 3rd party systems including 3rd party Management/Provisioning Servers (OSS/BSS)

#### Alarms & Notifications

Enables users to customize any number of notification and alarm events and thresholds and get notified via e-mail. For example, Cloud connection status of a device (on-line, offline), CPU load threshold and License availability threshold.

#### Wizard Integration

Enables Cloud users to generate complex configurations from simple input forms;
Execute Configuration
Wizards on the Cloud;
Distribute configurations to the devices and Store settings for later editing.

#### Supported Devices

**Gateways**—SN4131, SN4141, SN4151, SN4171 **eSBCs and IADs**—SN5300, SN5501, SN5531, SN5541, SN5551, SN5571



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