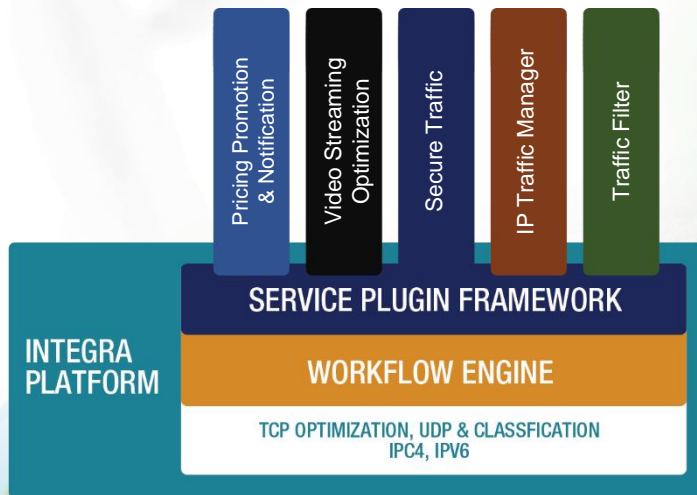# Integra

Manage, Optimize and Monetize the Growth in Mobile Data from a Single Touch Point

Mobile operators today have to traffic manage unprecedented volumes of mobile data consumption via diverse media streams. This is combined with high volumes of signaling information and made more difficult by the increasing adoption of secure/encrypted traffic by content providers. In order to provide differentiated / personalized user experience, maximize utilization of resources and protect the user experience, operators need the functionality to define and enforce data access policy for the next generation of mobile data services. This is the capability provided by the **Integra** suite of software both in network and virtualized in the telco cloud.

Integra provides service orchestration / service chaining and a dynamic policy enforcement point which can be expanded into the ALL-IP traffic flow transparently to intelligently detect when and where to add value.

The application service orchestration provided by Integra expands in a modular (VNF) manner to provide the next generation of solution options. Integra delivers a common framework for both data plane and control plane sharing and orchestration among a large variety of data flows from different networks, apps and users consuming a wide variation of web resources.

In a virtualized function the solution can be rapidly deployed and through integrated 3GPP interfaces. Integra thus complements and works with current and next generation infrastructure to deliver the dynamic application switching and core functions for mobile broadband.

INTEGRA PLATFORM

Pricing Promotion & Notification | Video Streaming Optimization | Secure Traffic | IP Traffic Manager | Traffic Filter

SERVICE PLUGIN FRAMEWORK

WORKFLOW ENGINE

TCP OPTIMIZATION, UDP & CLASSFICATION IPC4, IPV6

Partnership for success	Recognition for success
CISCO	2015 Excellence In SDN SDN ZONE SOFTWARE-DEFINED NETWORK

Features & Benefits

Integra is the **core platform for service orchestration chaining, and policy management**. It enables carriers to manage, monitor and monetize growing mobile traffic

* **Plug-in VAS platform** for data services and the central component of Openwave Mobility's 3GPP Application Function

* **Reduces TCO** through a single point of policy control and management for mobile data services

* **Integra software scales** on COTS x86 Blades delivers low latency & high capacity for application service orchestration

* **Highly differentiated services** across a range of protocols

* **Consistent, safe and secure mobile** internet access

* **Faster, Personalized** experience with quicker access to content and download

Integra delivers flexibility & scale in the data path, providing a single point to analyze, evaluate & orchestrate value added application functions. Scaling to new benchmarks in capacity on COTS blade centre hardware it is the industry's most scalable Layer 7 platform with 100 Gbps throughput on a standard Cisco UCS chassis in a standard mobile data traffic profile.

Here are some of the **additional value capabilities** delivered in this common orchestration framework:

Function	Benefit
Core Proxy	HTTP/S Protocol gateway; selective, policy based session engagement & enforcement; CDR generation, meta data (header) enrichment traffic analytics
TCP Optimization	Improves user effective throughput by 30% under variable network conditions
Web Optimization	Cache, compress web page traffic to reduce page load time up to 40%
Video Stream Optimization	Detects and optimizes over 70% of mobile video and audio traffic by inspecting the first octets from the payload; supporting video and audio content – including HTTP-PD, HLS, HDS, HSS, MPEG-DASH and micro-videos such as Instagram or Vine Real-time MP4 content & support for optimizing UHD H.265 and VP9 video Detailed reporting on savings and Quality of Experience in real-time for optimal system operation and planning
Audio Optimization	Significant savings, preserving perceived quality for a low TCO
Secure Traffic Handling	Detailed classification of the encrypted traffic (HTTPS) flow for data analysis; real time management for Adaptive Bit Rate Content reducing network demand by up to 50% for high definition encrypted video
IP Deep Packet Classification	Deep packet capabilities to identify classes of traffic and enforce policy based on PCRF for flows like P2P Bit torrent, tethering etc
Promotion	Inline content injection into smartphone browsing experience for operator/ MVNO branding/promotions eg data plan recommendation or external content promotion eg app of the day advertisement as a virtual popup
Content Categorization & Filtering	Real time content analysis to categorize web access - the core capability for services like MVNO content filtering (eg no adult content on a BYO device) or for home services like filtering content for minors
Zero Rate Quota	Quota & metering for zero rating, personal/group quota management
Agile Data Quota Plans	Innovative and intelligent data quota plans for pre & post-paid users eg video streaming plans, personal plans, groups/shared data plans, MVNO data quota plans
User Engagement	Real time quota threshold management to create subscriber promotions for repeat purchase / top up / quota refresh inline in the user experience (eg as a popup or re-direct) or via SMS/Email notification
Policy	Integration capabilities to RADIUS, PCRF or LDAP. Interworking with multiple P-GW, PCRF and BSS vendors

Openwave Mobility

Openwave Mobility empowers data service providers to manage and monetize encrypted and unencrypted mobile traffic, optimizing available RAN and maximizing the value of user data.

Openwave Mobility