Use Case: Roaming Data Plan

GENERATE NEW REVENUE AND ENHANCE CUSTOMER SATISFACTION

What Is the Value of the Roaming Data Plan?
Providing a reasonably-priced Roaming Data Plan for subscribers when they visit other regions or countries brings new operator revenue while eliminating high, unanticipated data roaming charges on customer bills. It encourages uninterrupted use of mobile data services on multiple subscriber devices regardless of what networks the subscriber encounters.

What Problems Does It Help Solve?
After roaming on other operators’ networks while visiting different regions or countries, mobile subscribers may come home to find unexpectedly high data usage charges on their wireless bills. To avoid these high charges, some users avoid using data services by turning them off while roaming. Others purchase local SIM cards from local operators for use during their visit. Still others only utilize data services on their phones when at Wi-Fi hotspots. All of these工作arounds result in lost revenue for the operator.

Giving subscribers a reasonably-priced bundle for mobile voice, text, and data usage when they are roaming on other operator networks increases customer satisfaction. It allows customers to avoid unanticipated high roaming charges and SIM card workarounds while providing additional revenue to operators. Another approach is to allow the travelling subscriber to access the voice and data allowance of his or her home plan for a monthly fee.

What Are the Benefits of the Roaming Data Plan?
- Increases ARPU by encouraging data usage from subscribers who might otherwise avoid using data services while roaming
- Protects subscribers from accidentally incurring large data roaming bills
- Increase customer satisfaction by providing proactive notifications as subscribers approach data roaming limits
- Up-sell expanded data plans while roaming in realtime based on time period, usage volume quota, or specific applications

What Do I Need?
Roaming Data Plans require intelligent network technologies that control the allocation of network resources based on subscriber plans. Operators also benefit from solutions that provide a fast, easy way to introduce new business models; gather network analytics per subscriber; and enable operational efficiencies between access, RAN, aggregation, and core layers of the network.

Why Cisco?
The Cisco Open Network Environment (ONE) converges physical hardware and virtual software technologies to make the network easier to program, access, use, operate, and manage. Cisco ONE can help you drive new revenues and monetize your network in new and profitable ways. Cisco’s solutions, platforms, and technologies provide a scalable, standards-based intelligent IP architecture that enables you to integrate subscriber knowledge with network and application intelligence in real-time to offer an expanding portfolio of “Use Cases,” which are innovative, revenue-generating applications and services that:
- Drive profitable data revenues by providing user personalization and seamless, secure heterogeneous access across 3G, LTE, and Wi-Fi networks
- Evolve your network into a platform for both direct and third-party partner monetization
- Enable you to establish profitable new business-to-business-to-consumer (B2B2C) revenue models
- Help you enter new, growing markets such as cloud services, content delivery, enterprise services, location-based services, machine-to-machine (M2M) applications, and more

To help deploy mobile Internet solutions efficiently and successfully, Cisco Services offers consulting for design, implementation, integration, and support.

For more information, please visit: [http://www.cisco.com/go/mobile](http://www.cisco.com/go/mobile)
Cisco solutions to enable you to deliver Roaming Data Plans along with many other revenue-generating services include:

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<th>Cisco Solution</th>
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<td><strong>Cisco ASR 5500 Multimedia Core Platform</strong></td>
<td>Part of the Cisco ASR 5000 Series packet core platform, the Cisco ASR 5500 Multimedia Core Platform combines massive performance and scale with flexibility, virtualization, and intelligence so network resources are available exactly when they are needed. The Cisco ASR 5000 Series’ elastic architecture enables its software-based mobile functions to utilize system resources across the entire platform to optimize performance and maximize efficiency. This approach allows operators to deploy more efficient mobile networks that can scale to support a greater number of concurrent sessions, optimize resource usage, and deliver enhanced services. Integrated Deep Packet Inspection (DPI) and value-added services on the Cisco ASR 5000 Series are deployed within the data session instead of requiring it to be off-loaded to standalone platforms.</td>
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| **Cisco ASR 5000 Series Small Cell Gateway** | Provides intelligent Wi-Fi access for subscribers, including support for:  
  - 3rd Generation Partnership Project 2 (3GPP2) WLAN Packet Data Interworking Function (PDIF) for untrusted Wi-Fi networks  
  - 3GPP Interworking WLAN (iWLAN) Packet Data Gateway (PDG) for untrusted Wi-Fi networks  
  - 3GPP iWLAN Tunnel Terminating Gateway (TTG) for untrusted Wi-Fi networks  
  - 3GPP evolved Packet Data Gateway (ePDG) for untrusted Wi-Fi networks  
  - Evolved Wireless Access Gateway (eWAG) for trusted Wi-Fi networks  
For Roaming Data Plans, Operators can offer ubiquitous service across 3G, LTE, and Wi-Fi access networks, and can include Wi-Fi usage in the plan with Hotspot 2.0 roaming. |
| **Cisco Quantum Policy Suite** | A comprehensive policy, charging, and subscriber data management solution that allows service providers to control and monetize their networks and to profit from personalized services. The solution supports the rapid and efficient deployment, management, and monetization of basic and advanced service offerings, such as service tiers, personal price plans, prepayments and a growing array of application-based services. |
| **Cisco Prime Analytics** | Provides business and network analytics capabilities that can enable both historical trend and real-time predictive policy decisions. Includes dashboards for data visualization and programmable interfaces to create system alerts in conjunction with policy. It includes indoor location analytics such as foot-fall, dwell time, and more. It includes the ability to leverage the DPI capability within the Cisco ASR 5000 Series of packet core solutions to correlate massive volumes of dynamic usage data and catalog data to deliver up-to-the-minute insights. Provides visibility to marketing to help determine impact of Roaming Data Plans and to create new tariff plans for roamers and their devices. |
| **Cisco Small Cell Solutions** | Designed to address the challenge of mobile service coverage and to expand network capacity. Small cells can extend voice and data services to mobile subscribers while offloading traffic from the macro network. Additionally, Cisco small cell capabilities are uniquely used to deploy consumer services that are based on indoor location and presence. |
| **Cisco Unified RAN Backhaul** | Reduces cost and increases capacity of Radio Access Network (RAN) backhaul from any multivendor radio, across any transport media. Includes unified operations, management, and migration technologies designed to reduce the complexity of operating, deploying, and scaling backhaul of multivendor, multigenerational RANs. Includes the Cisco ASR 901 Series Aggregation Services Routers – environmentally hardened, high-speed, low-power-consumption routers optimized for any-G cell-site Radio Access Network (RAN) backhaul and Ethernet access. And the small-form-factor Cisco ASR 901S is designed specifically to enable the wide scale deployment of small cells by extending routing intelligence to the pole. |