



RG Nets Fundamentals Boot Camp Training

RG Nets and WAV® are conducting a 3-day boot camp for network operators using RG Nets gateways and controllers to manage their Revenue Generating Networks.

The camp spans three days with five sessions and an optional certification exercise. Audio visual aids are utilized to introduce each session followed by a technical exercise configuring an rXg in a simulated Ruckus vSmartzone Wi-Fi network.

Topics include...

- RG Nets product line
- rXg theory of operations
- Configuring rXg based on specific session topics
- Hands on interaction with the rXg management console

An optional certification exercise is conducted at the end of the training which gives attendees the opportunity to configure an rXg using the concepts and sample network defined in the sessions. Attendees that successfully complete this task will be awarded an rXg Network Administrator certificate that allows the attendee to receive a demo version of rXg for their lab environment. This certification is a prerequisite for attending advanced training classes.

Location, Date and Hotel

The Boot Camp will be held at the WAV® headquarters located at 2380A Prospect Drive, Aurora, IL 60502 beginning Tuesday, August 9 through Thursday, August 11, 2016. The Boot Camp begins at 9AM each day, ending at 5PM the first two days and usually by 3PM on the final day.

For a list of hotels please visit <http://www.wavonline.com/contact-us/hotels.aspx>

Price for attendance

The price of the Fundamentals Boot Camp Training class is \$1,500 per student. Purchase orders must be received at least one week prior to the class and are 100% non-refundable. Fee includes access to rXg and wireless equipment provided by RG Nets. Breakfast, lunch, drinks and snacks for the three days during the training session are included. RG Nets also hosts a dinner event after the first day of training. Fee does not include other meals, transportation or hotel.

For more information, please contact your WAV Account Manager, e-mail us at info@wavonline.com or call us at 800.678.2419



Prerequisites

Working knowledge of TCP/IP, Wi-Fi wireless equipment and L3+ (VLAN aware) switches. Bring a suitable laptop. Students should also have a fundamental knowledge of network authentication, access control and network performance concepts.

Syllabus

Session 1: Introduction Day 1 – 9:00 to 10:00

RG Nets develops and markets the revenue eXtraction gateway (rXg). The rXg is an L7 router that is designed to be the only thing that an operator needs to deploy between a wired and/or wireless distribution infrastructure and the Internet. Key features include captive portal, content filtering, DPI, dynamic VLAN management, interstitial redirection, payload rewriting, PMS integration, quotas, traffic shaping, uplink control and much more. The Ruckus rXg combination provides a complete L1 to L7 solution for any kind of public access network, including high density stadiums, complex education scenarios, and room isolation wireline integrated Multi-dwelling deployments.

Related Topics

- RG Nets product line
- Features overview
- Deployment considerations
- Scalability
- Integration concepts
- Theory of operation

Session 2: Basic WAN Configuration Day 1 – 10:00 to 12:00

rXg is designed to be the only network element required between the operator's WAN and LAN to provision subscribers, and as such is the primary source of WAN resource management for the network. rXg is an Ethernet in/out device and supports all interfaces. rXg functionality includes uplink (Link Control) aggregation – meaning multiple uplinks can be combined with no additional cost or complexity. This session will cover WAN connectivity options and benefits and implementation of multiple uplinks and proper port assignment.

Related Topics

- Uplink addressing
- Uplink aggregation and failover
- Uplink affinity and diversity
- Many-to many NAT / CGNAT
- DMZ BiNAT
- SSL Certificates

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Session 2: Basic LAN Configuration Day 1 - 1:00 to 5:00

Designing the network to optimize performance, reliability, security and revenue generation is extremely important and is a major differentiator enabled by rXg. In today's public access networks guest isolation is imperative. In this session we will go through different network LAN design options afforded by RG Nets with best practice rXg installation and network integration using Dynamic Per User / Per Unit VLANs as a focus. We will also provide instruction on interacting with both remote and onsite LAN controllers.

Related Topics:

- LAN addressing
- Auto-increment subnets
- Auto-increment VLANs
- RADIUS server config for VLAN assignment

Session 3: Introduction to Policies Day 2 - 9:00 – 12:00

Creating policies from operator defined rules is a very precise process and a knowledge of the effects of rules on the user experience and their sequence of integration will determine much of the effectiveness of rXg. The rXg enables operators to insert content into the user experience in the form of advertisements, announcements and incentives through portals, web page manipulation and interstitial redirection techniques. Policies also contain thresholds, limitations, and behavior, that when exceeded trigger automatic subscriber policy changes that provide operator defined subsequent activity or network restrictions.

Related Topics:

- Theory of operations
- Enabling the rXg's integrated captive portal
- Basic content filtering and forwards
- Configuring traffic shaping
- Basic event trigger configuration
- Groups, Identities, Plans



Session 4: Revenue Extraction Day 2 - 1:00 – 5:00

rXg contains a billing system for extracting revenue from the network subscribers. There are several built in methods supported. Credit card payments from numerous merchant processing companies are supported through simple drop down lists of the most popular are included in rXg. rXg also supports many popular Property Management Systems (PMS). These PMS systems allow the operator to automatically provision customers and authenticate directly through the front desk system and take in considerations like reward program status and room type. New authentication programs such as social media, content provider and subscription devices are proliferating. Revenue is also extractable through web manipulation – advertising content and coupons.

Related Topics:

- Merchant accounts
- PMS interfaces
- API and custom integration
- Social media

Session 5: rXg gateway, virtualization and HA Day 3 - 9:00– 12:00

Choosing the right rXg solution for each network is an important skill as there are many considerations such as: how much uptime is required, what is the cost of downtime – in lost revenue or customer satisfaction. Budget is another consideration as is density and number of concurrent devices, and the likelihood that more capacity in the network is required. Other considerations such as greenfield or existing network (switches/AP's) can make the decision even more difficult. Finally, there are other technology constraints. All of these considerations and decision points will be explained in this session.

Related Topics:

- Software only or turnkey solutions
- Single Instance Gateways
- High Availability Clusters
- Multiple instance gateways
- Cluster Controllers
- Fault Tolerant Clusters

Exercise: Configuring for certification Day 3 - 1:00 to 3:00

The rXg NE certification involves configuring a sample network following a pre-installation questionnaire. This exercise will require each student to configure an rXg for installation and integration into an RGN.

Including:

- Gateway and Cluster Installation Preparation
- WAN and LAN configuration
- Policy creation
- Group identification

Q&A session from 1:00 to 3:00 for those not wishing to participate in the optional certification exercise.

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