Captive Portal, Firewall, and WAN Aggregation Requirements

Feature Lists

RVTEC 2017
Duluth, Minnesota

SatNAG
Satellite Network Advisory Group

UNOLS
UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

https://satnag.unols.org

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Requirements

It is important to define the desired outcomes and constraints up front when comparing multiple technical solutions. Doing makes it easier to objectively identify and eliminate devices that do not deliver the desired outcomes.

Features should be identified as:

- **R**equirement - Must have / Show Stopper features.

- **I**deal - Very desirable features but which are not required to deliver the core outcomes.

- **W**ishlist - Nice to have features but not mission critical.

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Captive Portal

- R - Per source/destination IP/DNS Hostname based traffic control

- R - Per user based traffic control

- R - Up/Down stream daily capacity usage quota (MB per day)

- R - Up/Down steam QoS bandwidth usage limits (kbps)

- R - Zone / Chain Based Firewall Rules

- R - Application Filtering

- R - LDAP / RADIUS Authentication Support

- R - SSH Command Line Interface

- R - Platform / Browser Plugin independant Web User Interface

- R - High Availability Configuration

- R - Stand Alone Functionality (No Internet Dependencies)

R - requirement   I - ideal   W - wishlist

- I - Firmware Upload which can be done without Internet Access

- I - User Viewable Usage "Meter" Web Page

- I - Per TCP Session Logging (Packets, Packet Size, Duration, Timestamp)

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Firewall

- **R** - Per source/destination IP/DNS Hostname based traffic control

- **R** - Zone / Chain Based Firewall Rules

- **R** - Application Filtering

- **R** - SSH Command Line Interface

- **R** - Platform / Browser Plugin independant Web User Interface

- **R** - High Availability Configuration

- **R** - Stand Alone Functionality (No Internet Dependencies)

- **I** - Firmware Upload which can be done without Internet Access

- **I** - Per TCP Session Logging (Packets, Packet Size, Duration, Timestamp)

- **I** - UTC Timezone support (For consistent logging)

- **W** - RESTFUL API (JSON / XML)

R - requirement   **I** - ideal   **W** - wishlist

- **I** - SNMP

- **I** - Custom Configurable and Schedulable Reporting with Email support

- **W** - Text Based Exportable / Importable Configuration Backup

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WAN Aggregation

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