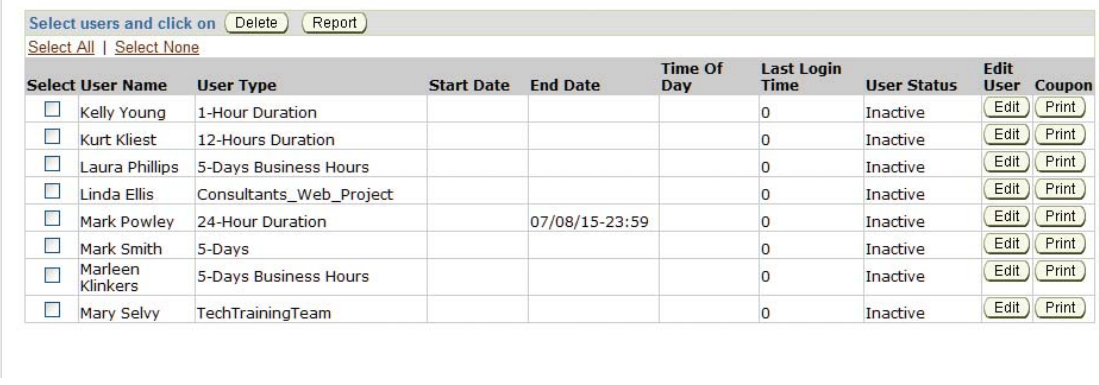
Technical Marketing Engineering
Wireless Technology

Guest Access Manager Advance Guest Access Application Overview

Technical Marketing Brief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☐	Laura Phillips	5-Days Business Hours				0	Inactive	Edit	Print
☐	Linda Ellis	Consultants_Web_Project				0	Inactive	Edit	Print
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☐	Mark Smith	5-Days				0	Inactive	Edit	Print
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Guest Access Manager Advance (GAMA)

This Technical Marketing Brief (TMB) provides a brief description of the Guest Access Manager Advance (GAMA) Guest Access application.

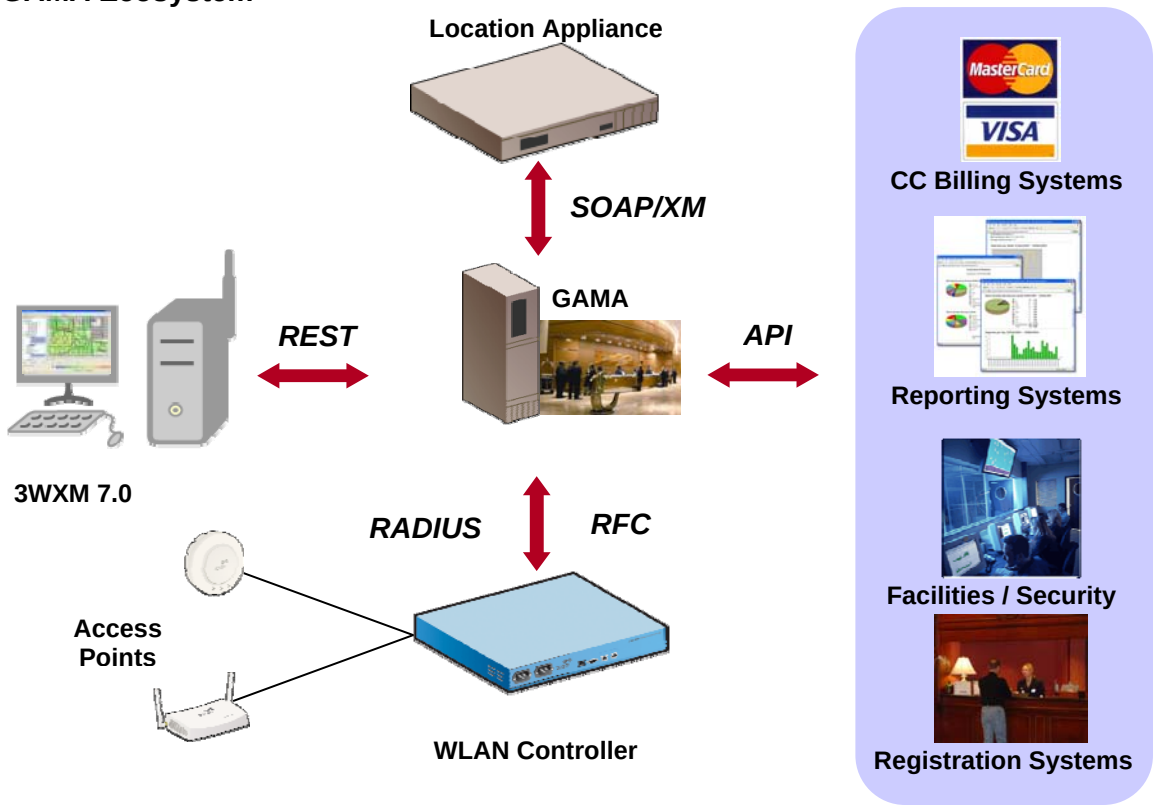
GAMA

Advanced Access Control for Enterprise Wi-Fi Networks

GAMA is a software tool that gives the IT manager full control over client access to their Wi-Fi networks. The network manager can fine tune access and authorization on the wireless LAN to an extent never before possible, both for primary users on the network and for guests. With GAMA, you not only permit or deny access, but change authorization attributes – what resources the user has access to – on the fly based on changing conditions.

GAMA is an entire software platform and ecosystem, which works seamlessly with other 3Com and 3rd components such as 3Com network management tool and the Newbury Location Appliance. It is also designed to work with external software applications such as credit card billing systems, guest registration systems, facility management systems, and custom reporting systems.

GAMA Ecosystem

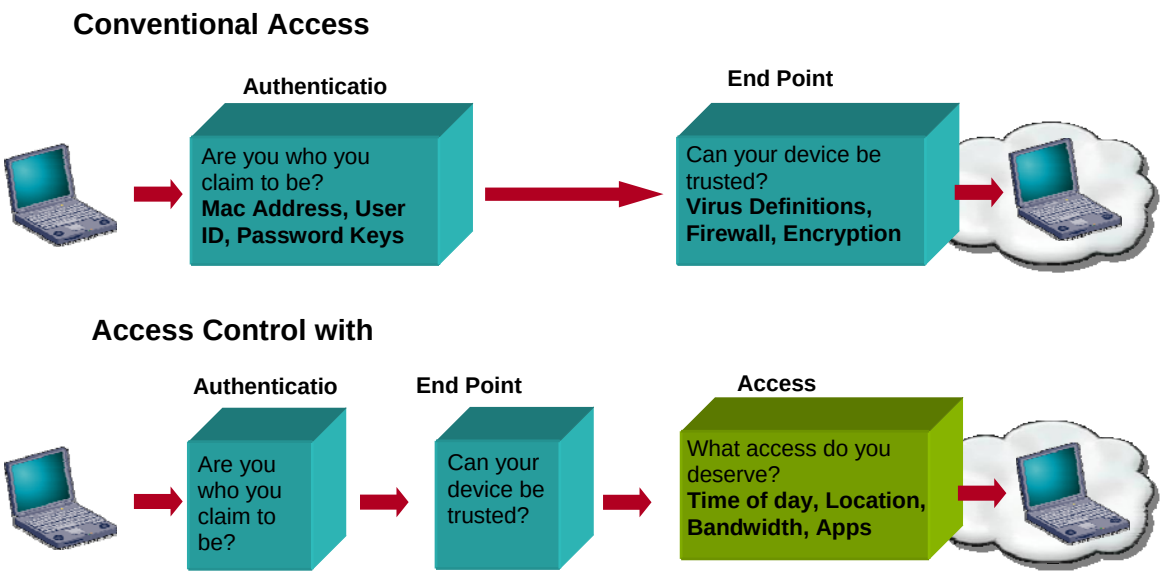


Dynamic Authorization

GAMA works with your other Wi-Fi networking infrastructure equipment such as RADIUS to enable you to change access to network resources for users based on dynamically changing conditions or events. Such conditions include the user's location or change in location, the user's SSID (wireless network name), after roaming to a new access point, or based on meeting certain conditions from RADIUS accounting, such as session life or amount of traffic passed. A user's access to resources can be updated during the middle of a networking session if desired.

Access Control Rules (ACRs)

GAMA introduces sophisticated Access Control Rules (ACRs) to enact dynamic authorization. With ACRs the IT manager has extensive flexibility over how they control and change access for a user. Using a standards-based approach (RFC 3576), GAMA augments the existing RADIUS server to change the client's access to various network resources based on location, time of day, identity of user, SSID, VLAN, and accounting data. GAMA can change authorization attributes during active networking sessions, and invoke ACRs on demand, via the API from another application, or by time or date via the built-in scheduler.



Setting up Access Control Rules

To set up an ACR, the IT manager would first name the rule, then construct match filters based on any combination of SSID, User Name pattern (e.g. domain\username), physical location, and other criteria. Next, IT determines the actions to take against the matched sessions, such as changing the authorization attributes or disconnecting the user. Next, they decide what event should trigger the in-session update, such as client roam, location change or RADIUS accounting update. Finally, IT decides when and how the ACRs should be invoked, whether they should happen automatically upon meeting the conditions, or scheduled to run at set times.

Location Integration

GAMA integrates seamlessly with the Newbury Location Appliance to provide access control and dynamic authorization based on a user's physical location. The Newbury Location Appliance provides real time location positioning for any Wi-Fi device accurate to within 3 meters. GAMA adds location information to the user's RADIUS accounting data enabling the network manager to invoke policies based on physical location such as accept/deny, change bandwidth, or change allowed resources.

Open APIs to Integrate with Other Systems

GAMA ships with published, open, standards-based, Web-based open Application Programming Interfaces (APIs) to make it easy to integrate its functionality with other systems. Likely 3rd party applications for such integration include credit card billing systems, facility management systems, hospitality registration systems, IPS/IDS systems and custom reporting systems.

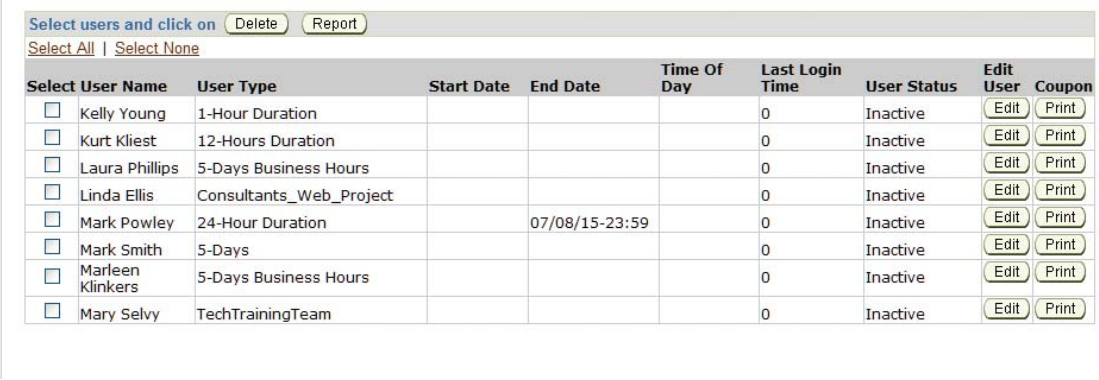
RADIUS Accounting and Reporting

GAMA uses standards-based RADIUS accounting to calculate utilize per user statistics including lifetime session counts and total traffic passed for session. Reports can be generated based on these statistics in GAMA or from a 3rd party application.

Guest Access

GAMA provides industry leading guest access functionality with precise guest access control by time-of-day, day-of-week, date range, and duration. GAMA includes pre-defined profiles templates for different types of guests including guest passes for 1 hour, 12 hour, 24 hour, 5 days, 5 days - Business Hours only, and the ability to create custom templates. GAMA provides the ability to create guest accounts in bulk; with intuitive or random usernames (passwords are always random). A pre-existing list of usernames can be imported.

While providing rich functionality for IT, GAMA also makes it easy for nontechnical front desk staff to use the system. They are given provisioner access which allows them to create guest passes but unlike other guest systems carries no risk to the integrity of production network. No provisioner has access to WLAN controllers or other networking gear. The provisioner needs no networking knowledge. They can be assigned only certain guest types to manage, and can manage only the guest accounts they created. With up to 10,000 users per GAMA server, it's ideal for conventions, universities, and large enterprise.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Key Applications

The applications for such granular and dynamic access control are unlimited but are illustrated in the following examples.

- **Education**

A professor is giving a test from 2 pm - 3 pm in Classroom 230. She has the ability to change Wi-Fi network access for students instantly to deny access to the Internet during that time and at that location. With the professor's option, the students could still have access to relevant classroom materials on the LAN.

- **Corporate Guest Access**

A large company wants to provide a hired consultant access to the Internet and certain LAN resources but only while working in an assigned building or areas of the building. If the consultant tries to access the network from another location, he will be denied access even with valid log-in credentials.

- **Bandwidth Management**

A user on the network is consuming an excessive amount of bandwidth. After a set value of traffic is crossed within a set period of time, the application applies tighter bandwidth restrictions. For example, a rule can be set that for any given user, after 10 MB of download in any given hour, the user is moved down from full access to the organization's 1.5 Mbps T1 line to 100 Kbps maximum.

- **Extra layer of security for very sensitive networks**

All users can be prevented from accessing the network from unauthorized locations even with legitimate credentials. This adds an extra layer of security against offsite attackers who may have stolen legitimate credentials, e.g., "the parking lot hacker".

Key Features

Access Control Plug-in

- Creation of custom policies – Access control rules – based on a combination of filters such as:
  - SSID
  - User Name pattern (e.g. domain\username)
  - User Type
  - Location
  - Accounting (lifetime or session)
  - Time of Day
  - VLAN
- Disconnect or change access attributes such as ACLs, bandwidth restrictions, or quality of service markings dynamically for any user session on the network
- Location based policy control with ability to apply various policies based on identity in the same location.
- Adds additional layer of security

Enterprise Plug-in

- Per user data access reporting
- Physical location (Newbury Location Appliance) information as a part of session reporting
- Customizable data traffic and client connection reporting via API

Guest Access Plug-in

- Separate roles for Administrator, Provisioner and Self-sign user
- Flexible and customizable guest profiles
- Customizable coupons
- Guest access reporting

- Bulk user creation
- Optional ways to block unauthorized guest access such as multiple sign-in, excessive password retries
- One click lock-out of guest use

Third Party Integration: API's

- Fully open, easy to use REST API
- Covers all aspect of the application including:
  - Access Control
  - Location Based Firewall
  - Custom Reporting
  - Guest Access Integration

Supported OS

- Windows XP (SP2 and higher)
- Windows 2003 (server)

Licensing Requirements

- **3CWXGAMA-BASE –** Base License w/ guest access only (50 Guests)
- **3CWXGAMA-ENT –** SKU for license upgrade with up to 10,000 guests and RADIUS accounting w/ relevant APIs. **Requires 3CWXGAMA-BASE**.
- 3**CWXGAMA-ACCESS –** SKU to get Access Control Rules and Newbury Location Appliance integration w/ relevant API. **Requires 3CWXGAMA-BASE and 3CWXGAMA-ENT.**

Note: Guests – Active or Passive. This is just with respect to the user entry in the database. 1 Guest entry may have simultaneously logins and still only count as one guest.