



# ***Release Notes for Broadband Access Center for ETT<sub>x</sub> Release 1.0***

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October 28, 2002

These release notes are for the Cisco Broadband Access Center for Ethernet to Home/Business (BAC-ETT<sub>x</sub>) solution Release 1.0 software. The releases notes describe the system requirements, hardware and software features, and known caveats and issues.

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# Introduction

The Cisco® Broadband Access Center (BAC) for Ethernet to the home, building, or campus (ETTx) is a subscriber-management application for ETTx networks. Cisco BAC-ETTx manages subscribers and their service entitlements, and enables subscriber self-registration and self-care, thereby reducing service providers' operational costs associated with subscriber and service deployments. The administrative interfaces in Cisco BAC-ETTx give service providers comprehensive views of subscribers and provide subscriber traceability, reporting, and troubleshooting. The open architecture of Cisco BAC-ETTx allows easy integration with legacy systems and new applications as required by the Cisco ETTx operators.

## System Requirements

Cisco BAC-ETTx runs on the Sun Solaris 8 operating system. The minimum recommended configuration for lab trial is one Sun Fire V120 server with an UltraSPARC IIi processor, a 650-MHz CPU, 2 GB of RAM, and a 4-GB hard disk. For deployment, the minimum recommended configuration is one Sun Fire V210 server with an UltraSPARC IIi processor, a 1-GHz CPU or higher, 2 GB of RAM, a 36-GB hard disk, and one DPE-590 appliance (a self-contained Cisco appliance). Specific system requirements depend on the specific customer environment. For how to design and implement the BAC-ETTx solution, refer to *BAC-ETTx Design and Implementation Guide* (EDCS-270058).



### Note

BAC-ETTx requires pre-installation of Oracle 8.1.7, the current patches to the Solaris 8 operating system from Sun Microsystems and patch 112438.

## Supported Hardware

BAC-ETTx supports the hardware devices listed in [Table 1](#).

**Table 1** *Supported Hardware Devices*

Supported Device	Cisco IOS Version
Catalyst 2950 EI	12.1(6)EA2a or later (Enhanced Image)
Catalyst 3550	12.1(9)EA1c or later
Catalyst 4000	12.1(13)EW1
Catalyst 3500XL	12.0.5(XU) or later

## Services and Features

The following services are supported in BAC-ETTx 1.0:

- Always-on Internet access of various speed and numbers of dynamic IP address
- Static IP service

The following features are supported in BAC-ETTx 1.0:

- Zero-touch service activation to enable fully automated service subscription, provisioning and provide instant service activation without intervention of human operator
- Self-care and self-registration to provide instant service subscription and modification without intervention of human operator
- Flow-through provisioning from order entry to activation of service
- IP address assignment and management for flexible definition of IP address assignment criteria and administers DHCP and DNS services
- Service management for flexible service definition to adapt to different business environments
- Subscriber traceability of IP history and reporting
- Subscriber event logging and troubleshooting
- Device inventory management for maintaining a logical and physical relationship of devices for quick and easy access
- API for northbound integration to third party systems such as order management

## Installation Notes

The procedure for installing BAC-ETTx is documented in the Solution Implementation and Configuration chapter of the *BAC-ETTx Design and Implementation Guide* (EDCS-270058).

## Limitations and Restrictions

Customer Service Representative (CSR) registration of subscribers is the only registration model supported for subscribers serving by Cisco 3500XL. Self-registration is not supported because of hardware limitations, namely lack of access control list and rate-limiting.

# Caveats and Known Issues

The following caveats were found in the testing of the BAC-ETTx 1.0 solution:

<b>#1 Caveat, Limitation, or Issue</b>	The BAC-ETTx software considers switch configuration resulting in warnings as successful. When a service activation request from SMC fails in the device/access switch due to certain problems such as applying a non-existent policy map or ACL, IE2100 returns with a “warning” status rather than an “error” status, hence SMC considers the job to be successful and returns “service activation successful” message to the user.
<b>Workaround or Resolution</b>	In order to avoid this problem, ensure that the policy maps, class maps and access list are configured on the access switch as described in Chapter 3 in the BAC-ETTx Design and Implementation Guide.
<b>DDTS Number (if available)</b>	CSCec47339
<b>#2 Caveat, Limitation, or Issue</b>	Switch a PC client from non-option 82 to an option 82 device.  When a BAC-ETTx subscriber switches his PC from a port connected to non-option 82 switch (such as 3500xl or a 2950) to a port connected to an option 82 switch (such as 3550), the group object created by SMC in BPR for this client is not deleted. Hence the device information in BPR for this client will show up with DHCP Criteria set as unprovisioned computer and device state set to provisioned /Registered. As a result of this, the client may not get a public address even though service has been activated.
<b>Workaround or Resolution</b>	In this case, the CSR manually deletes the device object corresponding to the Subscriber PC’s MAC Address using BPR GUI after unregistering the subscriber using BAC-ETTx Admin GUI.
<b>DDTS Number (if available)</b>	CSCec65109
<b>#3 Caveat, Limitation, or Issue</b>	Subscriber Lease History. BAC-ETTx logs the IP addresses leases offered to a given switch port. When the lease history of a subscriber is queried, BAC-ETTx looks up the associated port and retrieves the corresponding IP leases information. Current implementation of BAC-ETTx does not include any subscriber identifier in the lease history. As a result, the lease history associated with a given port may contain that of a previous subscriber at the same user port.

<b>Workaround or Resolution</b>	If subscribers join and leave the network frequently (e.g., due to large amount of moving in the city), it is recommended that the IP history be archived frequently so that the active lease history in BAC-ETTx does not include the old IP lease information. As part of software enhancement in subsequent releases, BAC-ETTx will include a subscriber identifier in the lease history so that lease history associated with the port corresponding to an old user will not be retrieved.
<b>DDTS Number (if available)</b>	CSCea70339

<b>#4 Caveat, Limitation, or Issue</b>	BPR DPE software needs to be installed and configured in the Console Mode as described in the BPR Installation Guide. Also, refer to Chapter 4 “Installing BPR” section in <i>BAC-ETTx Design and Implementation Guide</i> (EDCS-270058).
<b>Workaround or Resolution</b>	NA
<b>DDTS Number (if available)</b>	NA

<b>#5 Caveat, Limitation, or Issue</b>	Need to manually enable provisioning FQDN for DPEs. After configuring the DPE, (Refer to the section “Configuring a Device Provisioning Engine” in the Installation Guide of BPR 2.0) the Fully Qualified Domain Name (FQDN) needs to be configured on the DPE, as described in Chapter 4 “Installing BPR” section in <i>BAC-ETTx Design and Implementation Guide</i> (EDCS-270058). This is in order for the CNR Extensions to communicate to the DPE.
<b>Workaround or Resolution</b>	NA
<b>DDTS Number (if available)</b>	CSCea50718

<b>#6 Caveat, Limitation, or Issue</b>	Adding additional MAC Addresses to a subscriber using static IP address on a non-option 82 switch. When an attempt is made to add additional MAC addresses to a subscriber subscribed to a static IP address service on a 3500xl/2950 (Non-option 82) switch, the software reports an exception. Currently only a single MAC address (client PC) is allowed to subscribe on the switch port.
<b>Workaround or Resolution</b>	NA
<b>DDTS Number (if available)</b>	CSCec65109

<b>#7 Caveat, Limitation, or Issue</b>	Performance degradation and a Java OutOfMemory error.
<b>Workaround or Resolution</b>	<p>It is recommended to make the following changes on the BAC-ETTx SMC server to improve performance when deployed in installations exceeding 3000 subscribers:</p> <ul style="list-style-type: none"> <li>• Increase the Heap sizes in &lt;smc-home&gt;/jakarta-tomcat-4.0.6/bin/catalina.sh to Xms128m and Xmx256m. The smc-home is the directory BAC-ETTx SMC server software is installed. Default directory is /opt/CSCOSmc.</li> <li>• Disable BAC-ETTx SMC component debug messages. Details related to configuration of debug levels for SMC components are documented in Chapter 4, “Solution Implementation and Configuration” of the <i>BAC-ETTx Design and Implementation Guide</i> (EDCS-270058).</li> </ul>
<b>DDTS Number (if available)</b>	N/A

<b>#8 Caveat, Limitation, or Issue</b>	The Admin application Subscriber Management tab was observed to be slow for the first service creation job attempted. Subsequent operations were observed to be normal.
<b>Workaround or Resolution</b>	NA
<b>DDTS Number (if available)</b>	CSCec59966

<b>#9 Caveat, Limitation, or Issue</b>	Install GUI does not check swap space available for SPE install. SMC Installation GUI currently does not check if enough swap space is available in /tmp for SPE Installation which is embedded into SMC Installation. As a result of this, if the SMC server runs out of swap space when SPE is attempted to be installed by SMC, it just skips SPE Install and moves onto Install other SMC components.
<b>Workaround or Resolution</b>	In order to avoid this, ensure that the system pre-requisites listed in the <i>BAC-ETTx Design and Implementation Guide</i> (EDCS-270058)) are followed during installation of the software.
<b>DDTS Number (if available)</b>	CSCec44665

## Caveat for Client Applications using BAC-ETTx SMC APIs

<b>#10 Caveat, Limitation, or Issue</b>	Client applications trying to integrate with BAC-ETTx APIs are advised to use JDK 1.4.1_05 or higher, or JDK 1.3.x on the client side, because the applications might encounter an “OutOfMemoryException” due to memory leak in StringBufferToString() API implementation in the JDK version. For more information, refer to Sun’s Java Bug Parade at the following URL: <a href="http://developer.java.sun.com/developer/bugParade/bugs/4724129.html">http://developer.java.sun.com/developer/bugParade/bugs/4724129.html</a> for more details.
<b>Workaround or Resolution</b>	NA
<b>DDTS Number (if available)</b>	NA

## Obtaining Cisco Documentation

This chapter explains how to obtain documentation from Cisco Systems.

### World Wide Web

You can access the most current Cisco documentation on the World Wide Web at this URL:

<http://www.cisco.com>

Translated documentation is available at this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

### Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

### Ordering Documentation

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:

[http://www.cisco.com/cgi-bin/order/order\\_root.pl](http://www.cisco.com/cgi-bin/order/order_root.pl)

- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:

<http://www.cisco.com/go/subscription>

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

## Documentation Feedback

You can submit comments electronically on Cisco.com. In the Cisco Documentation home page, click the **Fax** or **Email** option in the “Leave Feedback” section at the bottom of the page.

You can e-mail your comments to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

You can submit your comments by mail by using the response card behind the front cover of your document or by writing to the following address:

Cisco Systems  
Attn: Document Resource Connection  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Related Documents

- CNS Network Registrar 6.0.1 Documentation Guide available at CCO or:  
[http://www.cisco.com/en/US/products/sw/netmgts/ps1982/products\\_documentation\\_roadmap09186a008018239e.html](http://www.cisco.com/en/US/products/sw/netmgts/ps1982/products_documentation_roadmap09186a008018239e.html)
  - Network Registrar Release Notes
  - Network Registrar Installation Guides
  - Web UI Guide
  - User's Guide
  - CLI Reference
- Broadband Provisioning Registrar Documentation available at CCO or:  
<http://www.cisco.com/en/US/products/sw/netmgts/ps529/ps4963/index.html>
  - Administration Guides
  - Installation Guides
  - Programming Usage Guides
  - Release Notes
- Broadband Access Center for Broadband Aggregation available at CCO or:  
[http://www.cisco.com/en/US/products/sw/netmgts/ps5117/prod\\_technical\\_documentation.html](http://www.cisco.com/en/US/products/sw/netmgts/ps5117/prod_technical_documentation.html)
  - Installation and Configuration Guides
  - Programming Reference Guides
  - Release Notes
  - User Guide

## Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

### Cisco.com

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If you want to obtain customized information and service, you can self-register on Cisco.com. To access Cisco.com, go to this URL:

<http://www.cisco.com>

### Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two levels of support are available: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Cisco TAC inquiries are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

The Cisco TAC resource that you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

## Cisco TAC Web Site

You can use the Cisco TAC Web Site to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to this URL:

<http://www.cisco.com/tac>

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

<http://www.cisco.com/register/>

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC Web Site, you can open a case online by using the TAC Case Open tool at this URL:

<http://www.cisco.com/tac/caseopen>

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC Web Site.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

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