EAGLE Provisioning Application Processor

Release 14.0

Feature Notice

910-6008-001 Revision C

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Tekelec

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EAGLE Provisioning Application Processor

Feature Notice

Introduction

Feature Notices are distributed to customers with each new release of software.

The Feature Notice includes a brief feature overview, lists new hardware required if any, provides the hardware baseline for this release, and explains how to find the Release Notice and other customer documentation on the Customer Support Site for the EAGLE Provisioning Application Processor (EPAP) Release 14.0. See *Locate Product Documentation on the Customer Support Site*.

New Features for EPAP 14.0

EPAP 14.0 includes the following features:

Ability to Change System Required User Passwords
Security Enhancements
Self Healing DN Range in EPAP Database

Other Changes for EPAP 14.0

Other changes and enhancements for EPAP 14.0 are:

Java Compatibility
Browser Compatibility
Predictable Filename for PDB Automatic File Export
IP Addresses in PDBA Command Logs

Important Operational Changes

New or changed Error Messages are listed here. There are no new Alarms.

Compatibility

EPAP 14.0 is fully compatible with EAGLE 5 ISS Release 43.0. The EAGLE 5 ISS must be upgraded to a compatible release before the EPAP is upgraded to 14.0.

Table 1: Compatibility Matrix - EPAP 14.0

Product	Release	Compatibility
EAGLE® 5 ISS	39.2	NC
	40.0	NC
	40.1	NC

Product	Release	Compatibility
	41.0	NC
	41.1	NC
	42.0	NC
	43.0	FC

Ability to Change System Required User Passwords

The Ability to Change System Required User Passwords feature enhances the EPAP Graphic User Interface (GUI) to increase security restrictions and controls. The frequency and severity of these controls is can be configured by the administrator at user-specific level and system-wide levels.

Security enhancements include a new password requirement for viewing logs. The `appuser` user is the only user authorized to view logs and must supply a password to view the logs. In addition, strict password complexity, password aging, and password reuse rules are introduced.

Password Complexity

Password complexity rules for user passwords implemented by EPAP 14.0:

- The password cannot exceed 100 characters in length.
- The password must include at least one alpha character.
- The password must include at least one numeric character.
- The password must include at least one special punctuation character: question mark (?), period (.), exclamation point (!), comma (,), or semicolon (;).
- The password cannot contain three or more of the same alphanumeric or special punctuation character in a row.
- The password cannot contain three or more consecutive ascending alphanumeric characters in a row.
- The password cannot contain three or more consecutive descending alphanumeric characters in a row.
- The password cannot contain the user account name (login name).
- The password must not contain the user account name in reverse character order.
- The password must not be blank or null.
- The password must not be a default password.

Note: The option to enforce or not enforce password complexity has been removed.

Password Aging

Users can be forced to change their passwords after a certain number of days. The administrator can set a maximum password age of up to 180 days as a default for the system and can specify a different maximum password age for any individual user.

Password Reuse

Users cannot reuse their last *N* passwords, where *N* is a system-wide configurable number from 3 to 99, with a default of 5. The administrator cannot turn off this restriction by setting *N* to 0 (zero).

Security Enhancements

Security features for EPAP 14.0:

Rebase to TPD 4.0 or higher

EPAP is rebased to TPD 4.0 to pick up security improvements and better password restrictions.

Change of kernel parameters to prevent network attacks

Kernel parameters are modified to reduce the possibility of network attacks and other security breaches.

Removal of .rhosts

The `/home/epapall/.rhosts` file is removed from EPAP to prevent unauthorized access to the servers.

Restrict root account access

A new `allowRoot` script is introduced to modify Access Restriction for root account.

usage:

```
* [ allowRoot OFF] -
Comment all the entries in /etc/securetty
- PermitRootLogin Yes|No in /etc/ssh/sshd_config
- UnComment|Comment the line:
"#auth required /lib/security/$ISA/pam_wheel.so use_uid"in file
/etc/pam.d/su

* [ allowRoot ON] -
Uncomment all entries in /etc/securetty except ttyS0
- PermitRootLogin Yes|No in /etc/ssh/sshd_config
- UnComment|Comment the line:
"#auth required /lib/security/$ISA/pam_wheel.so use_uid"in file
/etc/pam.d/su

* [ allowRoot tty ON|OFF] -
Uncomment|Comment all ttyN in /etc/securetty

* [ allowRoot ttyN ON|OFF]

- Uncomment|Comment only ttyN specified by user

* [ allowRoot ttyS0 ON|OFF]

- Uncomment|Comment only ttyS0

* [ allowRoot ssh ON|OFF] -

PermitRootLogin Yes|No in /etc/ssh/sshd_config
* [ allowRoot allowSU
ON|OFF] - UnComment|Comment the line:
```

```
"#auth required /lib/security/$ISA/pam_wheel.so use_uid"in file
/etc/pam.d/su
```

TCP Wrappers

A new script `manageEPAPAuthIp` is introduced. This script is used to list, add, or delete Authorized IPs. If the value of `Restrict server access to authorized IPs` is set to `no`, then the server can be accessed from any IP address. If the value is set to `yes`, then the server can be accessed only from the IP addresses that are added in file `/etc/hosts.allow`.

Self Healing DN Range in EPAP Database

The Self Healing DN Range in EPAP Database feature spports a single DN Block conflict in the EPAP database by allowing the EPAP database to *self heal* when a command is executed to create a new DN Block that conflicts with existing DN Blocks. This feature allows defragmentation of the DN Blocks, where a DN Block is split into child DN Blocks when conflicting DN Blocks are added and then returned to the parent DN Block upon deletion of particular child DN Blocks.

For typical provisioning configurations, the average provisioning rate is approximately 50 Commands per Second (CPS). With the Self Healing DN Range in EPAP Database feature turned on, the average provisioning rate may decrease below 50 CPS. In worst case conditions, the provisioning rate may decrease to 18 CPS.

By limiting the number of commands in an import file, the provisioning rate can be improved, depending on the provisioning configuration. For example, multiple import files limited to 200,000 commands are more efficient than a single import file of several million commands. Other performance factors related to the Self Healing DN Range in EPAP Database feature are associated with the internal data distribution, which cannot be directly influenced by the user. If provisioning performance falls below expected levels, contact *Customer Care Center*.

When a self healing EPAP database encounters a conflict:

1. Pre-existing/conflicting DN Blocks are automatically deleted from the EPAP database.
2. New DN Blocks are created successfully with new attributes.
3. Old DN Blocks are split to create more DN Blocks for the range not covered by the new DN block.

When a new DN Block is deleted, a range of numbers is returned to the original DN Block.

Rules for the Self Healing DN Range in EPAP Database feature

- If the new DN Block is a subset of an already existing DN Block with different properties, the old DN Block is split into either 2 or 3 new DN Blocks.
- The new DN Block cannot have the same **bdn** and **edn** as an existing DN Block.
- The new DN Block cannot have a single DN address.
- The resulting DN Block cannot have a single DN address.
- More than one conflicting DN Block cannot exist in the EPAP database.
- If the new DN Block is a subset of an existing block with same properties, then the DN Block cannot be created.
- If the new DN Block conflicts with an existing block and is not its subset, then the new DN Block cannot be created.
- A DN Block that conflicts with a DN Block and has a `split` option of `no` cannot be inserted.

- A DN that conflicts with a DN Block and has a `split` option of `no` cannot be inserted.
- If a DN Block that is created by splitting an existing DN Block is deleted, then the complete DN Block that existed before the split is returned to the EPAP database.

Error Codes

Error Codes Introduced by the Self Healing DN Range in EPAP Database feature:

- PDBI_MULTI_DNB_CONFLICT: More than one conflicting DN Block exists in the EPAP database.
- PDBI_DNB_SAME_PROPERTIES: A DN Block with the same properties exists in the EPAP database and is a superset of the requested DN Block. Splitting eligibility of a DN Block is not a property for this error.
- PDBI_DNB_SPLIT_NOT_ALLOWED: an existing DN Block that was specified at the time of its creation or update is ineligible for splitting.
- PDBI_DNB_DLT_NOT_ALLOWED: A fragment of a master range cannot be deleted while its subranges are present.
- PDBI_DNB_PARENT_PROPERTY_MISMATCH: A fragment of a master range with differing attributes cannot be deleted. Splitting eligibility of a DN Block is a property for this error.

Other Changes

These enhancements are introduced in EPAP 14.0.

Java Compatibility

The EPAP Graphical User Interface (GUI) uses a Java banner applet to display real-time updates and status for both A and B sides of the MPS. The EPAP GUI supports Java 1.5 and 1.6 clients.

Browser Compatibility

Microsoft Internet Explorer® version 5.0 or later is supported and certified for use with the EPAP GUI. Mozilla Firefox® version 3.0.0 or later is partially supported for use with the EPAP GUI. If using Firefox, this message is displayed when logging in to the EPAP GUI:

```
CAUTION: The User Interface may not function correctly with the browser you are
using.
```

Predictable Filename for PDB Automatic File Export

The output filename format for PDB Automatic Export files is pdbAutoExport_<hostname>_<YYYYMMDDhhmmss>.

IP Addresses in PDBA Command Logs

The `pdba.cmd log` is updated to capture the IP address of connected CPAs. IP address and User ID information is already available in `cgi.dbg` and `security.log` for any external access through the GUI.

Customer Care Center

The Tekelec Customer Care Center is your initial point of contact for all product support needs. A representative takes your call or email, creates a Customer Service Request (CSR) and directs your requests to the Tekelec Technical Assistance Center (TAC). Each CSR includes an individual tracking number. Together with TAC Engineers, the representative will help you resolve your request.

The Customer Care Center is available 24 hours a day, 7 days a week, 365 days a year, and is linked to TAC Engineers around the globe.

Tekelec TAC Engineers are available to provide solutions to your technical questions and issues 7 days a week, 24 hours a day. After a CSR is issued, the TAC Engineer determines the classification of the trouble. If a critical problem exists, emergency procedures are initiated. If the problem is not critical, normal support procedures apply. A primary Technical Engineer is assigned to work on the CSR and provide a solution to the problem. The CSR is closed when the problem is resolved.

Tekelec Technical Assistance Centers are located around the globe in the following locations:

Tekelec - Global

Email (All Regions): support@tekelec.com

- **USA and Canada**

  Phone:

  1-888-FOR-TKLC or 1-888-367-8552 (toll-free, within continental USA and Canada)

  1-919-460-2150 (outside continental USA and Canada)

  TAC Regional Support Office Hours:

  8:00 a.m. through 5:00 p.m. (GMT minus 5 hours), Monday through Friday, excluding holidays

- **Caribbean and Latin America (CALA)**

  Phone:

  USA access code +1-800-658-5454, then 1-888-FOR-TKLC or 1-888-367-8552 (toll-free)

  TAC Regional Support Office Hours (except Brazil):

  10:00 a.m. through 7:00 p.m. (GMT minus 6 hours), Monday through Friday, excluding holidays

  - **Argentina**

    Phone:

    0-800-555-5246 (toll-free)

  - **Brazil**

    Phone:

    0-800-891-4341 (toll-free)

    TAC Regional Support Office Hours:

    8:30 a.m. through 6:30 p.m. (GMT minus 3 hours), Monday through Friday, excluding holidays

  - **Chile**

Phone:

1230-020-555-5468

- **Colombia**

  Phone:

  01-800-912-0537

- **Dominican Republic**

  Phone:

  1-888-367-8552

- **Mexico**

  Phone:

  001-888-367-8552

- **Peru**

  Phone:

  0800-53-087

- **Puerto Rico**

  Phone:

  1-888-367-8552 (1-888-FOR-TKLC)

- **Venezuela**

  Phone:

  0800-176-6497

- **Europe, Middle East, and Africa**

  Regional Office Hours:

  8:30 a.m. through 5:00 p.m. (GMT), Monday through Friday, excluding holidays

  - **Signaling**

    Phone:

    +44 1784 467 804 (within UK)

  - **Software Solutions**

    Phone:

    +33 3 89 33 54 00

- **Asia**

  - **India**

    Phone:

    +91 124 436 8552 or +91 124 436 8553

    TAC Regional Support Office Hours:

10:00 a.m. through 7:00 p.m. (GMT plus 5 1/2 hours), Monday through Saturday, excluding holidays

- **Singapore**

  Phone:

  +65 6796 2288

  TAC Regional Support Office Hours:

  9:00 a.m. through 6:00 p.m. (GMT plus 8 hours), Monday through Friday, excluding holidays

Related Publications

For information about additional publications that are related to this document, refer to the *Related Publications* document. The *Related Publications* document is published as a part of the *Release Documentation* and is also published as a separate document on the Tekelec Customer Support Site.

Customer Training

Tekelec offers a variety of technical training courses designed to provide the knowledge and experience required to properly provision, administer, operate, and maintain Tekelec products. To enroll in any of the courses or for schedule information, contact the Tekelec Training Center at (919) 460-3064 or E-mail `training@tekelec.com`.

A complete list and schedule of open enrollment can be found at `www.tekelec.com`.

Locate Product Documentation on the Customer Support Site

Access to Tekelec's Customer Support site is restricted to current Tekelec customers only. This section describes how to log into the Tekelec Customer Support site and locate a document. Viewing the document requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the *Tekelec Customer Support* site.

   Note: If you have not registered for this new site, click the **Register Here** link. Have your customer number available. The response time for registration requests is 24 to 48 hours.

2. Click the **Product Support** tab.
3. Use the Search field to locate a document by its part number, release number, document name, or document type. The Search field accepts both full and partial entries.
4. Click a subject folder to browse through a list of related files.
5. To download a file to your location, right-click the file name and select **Save Target As**.