InterSystems CACHÉ®

The Character-based (CHUI) Management Routines

Version 2009.1
30 June 2009

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The Character-based (CHUI) Management Routines

Introduction

The preferred and recommended way to manage a Caché installation is the System Management Portal. The portal provides a convenient, browser-based interface for controlling the system. However, to cover those instances when the system cannot be managed this way, Caché has several CHUI-based routines that can collectively accomplish the same purpose through a more simplified interface.

Each of the routines is described in its own section along with its top-level functionality. In most cases, the initial menu choice will lead to further requests for information until the routine has sufficient information to accomplish its task. To use any routine from the Caché Terminal, the user must be in the %SYS namespace and have at least the **%Manager** role. The routine, for example ^SECURITY, is invoked as expected with the command:

```
DO ^SECURITY
```

When the routine runs, it presents you with a list of options. Select an option by entering its number after the "Option?" prompt.

CAUTION: As previously noted, the preferred way to manage a Caché system is via the System Management Portal. Administrators who elect to use the routines described in this documents are assumed to have a detailed operating knowledge of how Caché works and what parameter values are appropriate for the options they choose.

The utilities described in this article are:

- ^SECURITY

- ^DATABASE

- ^SHADOW

- ^%AUDIT

- ^LEGACYNETWORK

General notes about prompts

- Each option has a numeric prefix. Select an option by typing its number. The option-number pattern is used throughout the routines.

- All option lists have an item to exit this level of menu and return to the previous level. You may also reply to the "Option?" prompt with **Enter**. This is interpreted as if you had chosen the "Exit" option, that is, you are finished with that section and you are presented with the next "upper" level of options. An **Enter** reply to the top-level of options exits the **^SECURITY** routine.

- Many of the prompts for information have a default value which is selected by typing the **Enter** key. When there is a default value available, it is shown after the prompt message and followed by the characters "=>" as in

```
Unsuccessful login attempts before locking user? 5 =>
```

  where the default value is 5 for the number of times a user may try to login and fail before the system locks their username.

- Prompts whose defaults are "Yes" or "No" also accept any matching partial response such as "yE" or "n" . The match is done ignoring the case of the response.

- In options whose intent is to alter the characteristics of existing user, roles, services, and so on, the existing value of the item is displayed as the default. Typing **Enter** preserves that value and moves on to the next prompt.

- Some prompts ask for a pattern to use when matching items such as user names. The default pattern is usually "*" that matches all items. In such patterns the asterisk matches any sequence of characters, much like it does in DOS. A pattern may also consist of a comma-separated list of items each of which is treated as its own pattern. An item is treated as being selected if it matches any pattern in the list.

CAUTION: There is nothing to prevent multiple instances of the same routine from being executed at the same time by different system administrators (or even the same administrator). If this happens, it is the responsibility of the administrators to coordinate their activity to avoid conflicts and achieve their objectives with regard to the coherence of the affected data.

1 ^SECURITY

This routine addresses the setup and maintenance of the data essential to the proper functioning of Caché security. The initial menu includes:

1. User setup

   This defines the identities of those who are permitted access to the system.

2. Role setup

Caché users are given permission to perform an action by their assignment to one or more roles. This section is where the characteristics of roles are defined.

3. Service setup

   Services control the ability to connect to Caché using various connection technologies. They are predefined by InterSystems. The parameters governing their use are set through this option.

4. Resource setup

   Resources represent assets, such as databases or applications, whose use is to be managed. A resource may represent a single asset such as a database, or it may protect multiple (usually related) assets such as a suite of applications.

5. Application setup

   Application definitions serve as proxies for the actual application code. Permissions on the definition are interpreted by the security system as granting the same permission on the application associated with the definition.

6. Auditing setup

   This section deals with the definition and management of events whose occurrence is to be noted in the audit log.

7. Domain setup

   Domains permit a community of users to be partitioned into several groups. This option allows an administrator to set up Caché security to accept users from multiple domains. The domains defined via this option exist only within the Caché system for the purpose of recognizing valid users. When multiple domains have been defined, usernames should include the domains they will be attempting access from, for example, president@whitehouse.gov. If a user's name is given without the domain identification, Caché uses the default domain (if any) set up in the System parameters section.

8. SSL configuration setup

   This section provides configuration tools if the instance uses Caché support for the SSL/TLS protocol.

9. System parameter setup

   The system parameters are a collection of security-related values that apply system-wide. This section includes the ability to export and import all an instance's security settings.

> **Note:** If you are importing security settings from a source instance configured with multiple domains to a target instance not configured to allow multiple domains *and* the source instance's default domain differs from that of the target instance, then the import does not update the target's default domain — you must explicitly set this value. To do this, use the **Default security domain** dropdown on the **System-wide Security Parameters** page (**[Home] > [Security Management] > [System Security Settings] > [System-wide Security Parameters]**).

10. Exit

2 ^DATABASE

The **^DATABASE** routine is used to manage databases; it also allows you to set values related to Caché Advanced Security.

1. Create a database

   Allows you to create a new database.

2. Edit a database

   Allows you to change the characteristics of an existing database, for example, by adding additional volumes.

3. List databases

   Displays the characteristics of one or more databases.

4. Delete a database

   Allows you to delete a Caché database. This action is irreversible.

5. Mount a database

   Makes a database ready for use by Caché. Databases must be mounted to Caché in order to be usable. Databases can be set to be automatically mounted at startup.

6. Dismount a database

   Permits you to quiesce a database and remove it from use by Caché.

7. Compact a database

   Reorganizes the data inside **CACHE.DAT**. Note that this option does not reduce the size of the database file.

8. Show free space for a database

Displays the available space for a database. This is calculated as the difference between its current contents and its current declared size.

9. Show details for a database

    Displays detailed information on a specified database including location, size, status, and other controlling parameters.

10. Recreate a database

    Creates a new, empty database with the parameters of the original database. The new database is the same size as the original database.

11. Manage database encryption

    Removes all the logical data from a database while preserving the properties of the database for reuse.

12. Return unused space for a database

    Frees either a specified amount of or all available extra space associated with a database, reducing it from its current size to its smallest possible size.

3 ^SHADOW

This routine allows an administrator to define and manage a Caché instance serving as a shadow system for another Caché instance.

1. Create a shadow

    Lets you specify the parameters needed to identify another system as the shadow server for this one.

2. Edit a shadow

    Lets you change the parameters associated with an existing shadow.

3. List shadows with properties

    Lists the systems defined as shadow servers along with their properties.

4. List shadows with running stats

    Lists the systems defined as shadow servers along with their performance information.

5. Start a shadow

    Initiates shadowing with a defined server.

6. Stop a shadow

Stops the shadowing activity.

7. Suspend a shadow

    Pauses the transmission of data to a shadow server.

8. Resume a shadow

    Resumes shadowing activity with a previously suspended server.

9. Restart a shadow

    Begin shadowing again with a defined server.

10. Delete a shadow

    Removes a system from the list of known shadow servers of this system.

11. Show detail of a shadow

    Shows all the information on a particular shadow server.

4 ^%AUDIT

This routine allows the reporting of data from the logs, and the manipulation of entries in the audit logs as well as the logs themselves.

1. Audit reports

    Permits you to specify selection criteria (date ranges, events, affected users, and so on) and display characteristics, then extracts the data from the audit log and formats it for presentation.

2. Manage audit logs

    Allows the extraction of log entries to another namespace, the export and import of audit log data to and from external files, and maintenance activities against the audit log itself.

3. Exit

5 ^LEGACYNETWORK

This routine supports configuration of various legacy networking tools that are available for use with Caché.

1. Network Parameter Setup

Allows you to display and edit various configuration variables for networking. This includes variables that are only relevant for particular networking protocols, such as DCP or DDP.

2. DCP Connection Setup

    Allows you to list, add, edit, and remove connections associated with DCP (the Distributed Cache Protocol), for connections using both UDP and Ethernet.

3. DDP Setup

    Allows you to view and edit connections associated with DDP (Distributed Data Processing); also allows you to manage local and remote VolumeSet UCI mappings.

4. LAT Setup

    Allows you to display and manage parameters for networking with LAT (Local Area Transport); also allows you to list, add, edit, and remove LAT services.

5. DTM Setup

    Allows you to display and edit various configuration parameters for networking with DTM (one of the InterSystems legacy products that preceded Caché).

6. COM Port Setup

    Allows you to list, add, edit, and remove COM ports (serial COMmunications ports). Adding and editing COM ports involves specifying various configuration parameters for them.

7. Exit