Manage update access keys with IBM Electronic Service Agent on IBM i

Xing Yang
Shu Hua

December 12, 2016

IBM Electronic Service Agent on IBM i provides the easiest way to manage the user access key on IBM i systems. It enables a system administrator to easily update the user access key before its expiration date.

Introduction

IBM® Electronic Service Agent™ on IBM i has introduced a new feature to help clients easily manage the refreshment of their *update access keys* (UAKs) for IBM i stand-alone partitions. For several IBM POWER8® processor-based server models, the initial UAK is installed during the manufacturing process with an expiration date that corresponds to the server's warranty period. When the UAK is unexpired, the application of entitled firmware updates is permitted.

Previously, when the UAK was about to expire, users were required to confirm the UAK expiration date, as well as download and refresh each UAK manually. This new feature allows the user to have the UAK's expiration date checked and the UAK refreshed automatically on IBM i systems by using Electronic Service Agent on IBM i.

Moreover, clients might administer this process manually or automatically on a weekly basis. The UAK management feature is specifically designed to perform the following tasks:

- Check the entitlement date (expiration date) of the UAK weekly.
- Download a new UAK if the expiration date is within 30 days.
- Apply the new UAK after it is successfully downloaded.

Technical details

This improved UAK management feature can be installed on IBM i 7.2 and 7.3 releases by applying PTF SI58783 (IBM i 7.2) and PTF SI58566 (IBM i 7.3).

For Hardware Management Console (HMC) controlled IBM i partitions, Electronic Service Agent on HMC will update the UAKs. The Electronic Service Agent on IBM i will only handle partitions

not managed by any management system such as the Integrated Virtualization Manager (IVM). Also, note that the UAK management feature is applicable for POWER8 (and later) systems with firmware 840 and later versions.

There are two ways of using this UAK management feature:

- **Manual**: A system administrator can manually kick off the process of checking UAK's expiration date, downloading UAK, and applying UAK. This is accomplished by running the WRKSRVAGT TYPE(*UAK) command. This can also be accomplished by running the go service command to access the Electronic Service Agent on IBM i main menu, then selecting option 20 (**Check and refresh Update Access Key**), as shown in Figure 1 and Figure 2.

Figure 1. Electronic Service Agent on IBM i main menu option 20

Help instructions on option 20 can help clients to understand this feature.

Figure 2. Help information on Electronic Service Agent on IBM i main menu option 20

```
QS9MAIN                    Electronic Service Agent
                                                    System:    .        .
  Select one of the following:

       ...............................................................
    Probl :                    Option 20 - Help                      :
     11. :                                                           :
     12. :  Checks if the Update Access Keys for the system is about to  :
     13. :  expire(<30 days).  If so, the key will be downloaded     :
     14. :  automatically and applied to the system immediately.     :
     15. :                                                  Bottom   :
     16. :  F2=Extended help   F3=Exit help   F10=Move to top   F12=Cancel  :
     17. :  F13=Information Assistant          F14=Print help     :
     18. :                                                           :
     19. :...........................................................:
     20. Check and refresh Update Acess Key

    Related
     70. Related Service Agent commands

                                                               Bottom

       ___

 F3=Exit    F12=Cancel
```

- **Automatic**: By default, there is no automatic UAK checking. The Change Service Agent Attribute (`CHGSRVAGTA`) command can be used to enable automatic checking. The `CHGSRVAGTA` command parameter (`REFRESHUAK`) can be used to establish automatic UAK management. By default, a job will be run every Sunday, but can be easily customized.
  Enablement steps:
    a. Enter CHGSRVAGTA and press F4.
    b. Enter Yes for **Enable**.
    c. Press Page Down.

  At this point, the Change Service Agent Attribute panel appears as shown in Figure 3. Specify the week day and time to use for UAK refresh processing.

Figure 3. Change Service Agent Attribute – refresh UAK configuration panel
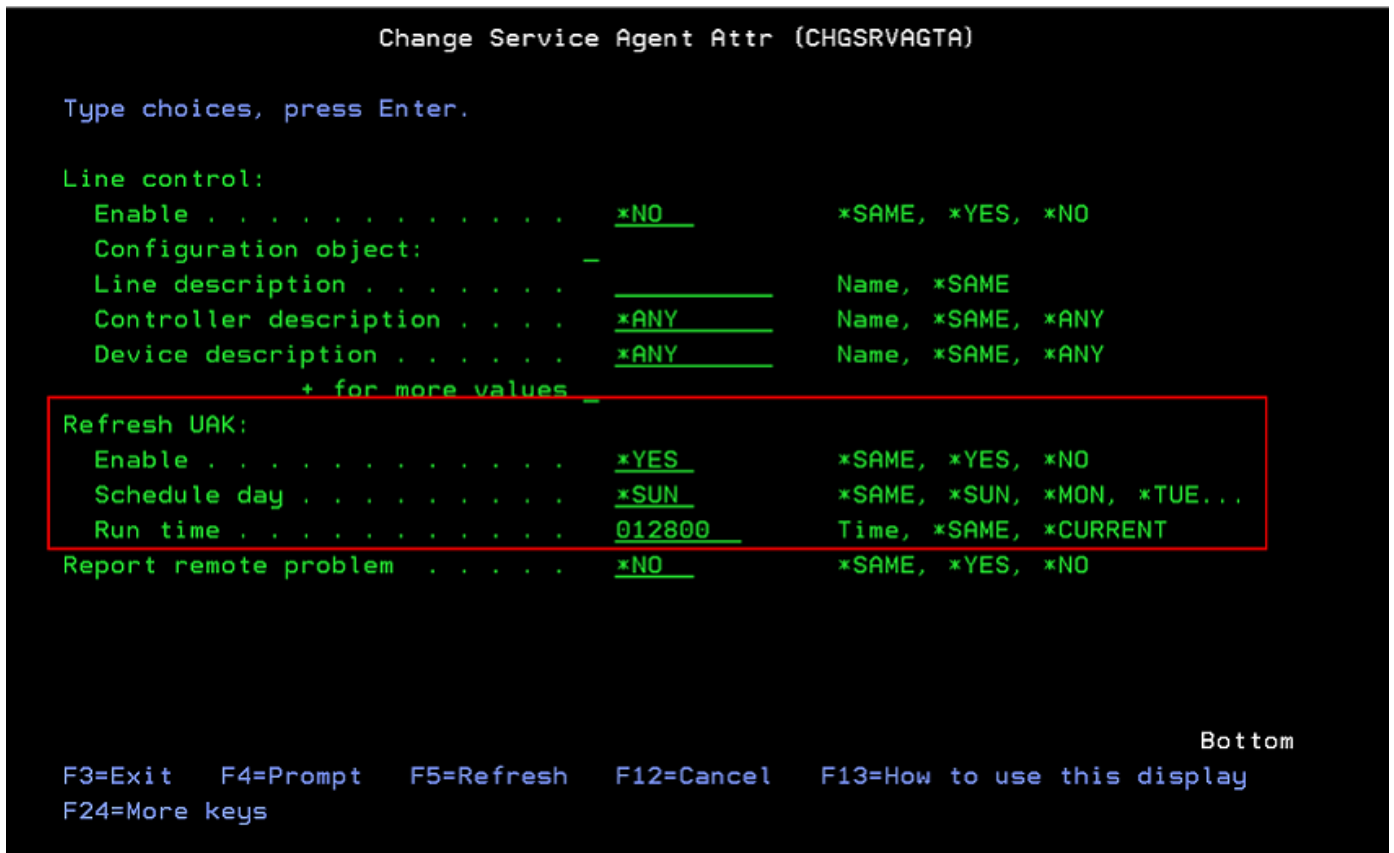
When the UAK management job is completed, one of the following two different messages will be provided as the result:

- **CPIEF87: Update Access Key has been handled successfully.**
  This message indicates that the UAK refresh processing determined that the expiration date of the UAK was within the next 30 days. The processing downloaded the new UAK and applied the new UAK successfully.
- **CPIEF88: Download and apply Update Access Key stopped.**
  The refresh processing stopped due to one of the following reasons:
  - This is not a stand-alone partition, so the key will be handled by its managing system (for example, HMC). Electronic Service Agent on IBM i does not do the management of UAK for such partitions. It does not mean a failure, but only means that the client does not need to do the management of UAK on the current partition.
  - This is a partition below POWER8, which does not support the update access key. It does not mean a failure, but only means that the client does not need to care about managing UAK of the current partition.
  - An error occurred while accessing and processing UAK expiration date by Display Firmware Status (DSPFMWSTS). Users can examine the details in the audit log and trace for Electronic Service Agent on IBM i.
  - The expiration date is beyond 30 days. There is no need to process the UAK.
  - Downloading the key was stopped. Information in audit log could provide details of error.

- The firmware is unavailable in this partition.
- Spawn process error. It may be resolved by trying again.

Summary

The new feature in Electronic Service Agent on IBM i provides clients on POWER8 (and later) processor-based servers with IBM i 7.2 or 7.3 operating systems an easier and automatic way to manage the update access key. By launching this function in Electronic Service Agent on IBM i, the whole process of refreshing the UAK (check expiration date of UAK, download new key, and apply it) will be automatically managed, easing the systems management burden for system administrators.

Resources

- Management of POWER8 Update Access Keys
- POWER8 Hardware Entitlement – Update Access Keys
- Managing Update Access Keys with IBM i ESA