



Enhancements & Fixes for Halcyon IBM i Product Suites and Network Server Suite

Covering releases: October to December 2012

(IBM i: 2012.278 to IBM i: 2012.343 inclusive)

Publication Date: January 2013

Copyright

Copyright 2013 Halcyon Software Limited. All rights reserved.

IBM, IBM i, Power/System i, OS/400 and i5/OS are trademarks of International Business Machines.

This document is intended as a guide to using Halcyon software. This documentation contains Halcyon proprietary and confidential information and may not be disclosed, used, or copied without the prior consent of Halcyon Software Limited, or as set forth in the applicable license agreement. Users are solely responsible for the proper use of the software and the application of the results obtained. Although Halcyon Software Limited has tested the software and reviewed the documentation, the sole warranty for the software may be found in the applicable license agreement between Halcyon Software Limited and the user.

Publication Revision: January 2013

Company Information

Registered US Office

Halcyon Software, Inc.
16 North Franklin Street
Suite 206
Doylestown, PA 18901
USA

Tel: +1-215-240-8838
Fax: +1-215-933-1428

Registered UK Office

Halcyon Software
5 The Forum
Minerva Business Park
Lynch Wood
Peterborough
PE2 6FT

Tel: +44 (0)1733 234995
Fax: +44 (0)1733 234994

Registered Australian Office

Halcyon Software (Australia) Pty Ltd
Level 3, IBM Tower
60 City Road
Southbank
Melbourne
VIC 3006

Tel: 613 9495 6600
Fax: 613 9495 6601

Web: www.halcyonsoftware.com
Sales: sales@halcyonsoftware.com
Support: technicalservices@halcyonsoftware.com

Foreword

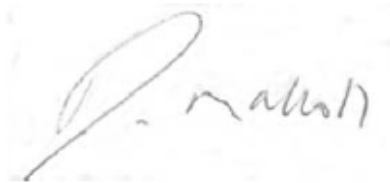
By Donnie MacColl, Technical Services Director

This update covers product enhancements and fixes between October and December 2012 for all Halcyon IBM i Software Suites and Network Server Suite.

These update notifications are intended to provide customers with the technical release information of all the latest product enhancements and fixes of our software so you can decide if you need to, or wish to, upgrade from your current version of Halcyon Software to a newer version.

Information contained in these documents is aimed at technical analysts, administrators and operations staff responsible for the maintenance of our software on their own systems or their client's IBM i (iSeries) systems.

These release notes will also assist with change and version control by providing the information and reasons as to why an upgrade is required.



Donnie MacColl

About Donnie MacColl



Prior to becoming Director of Technical Services at Halcyon Software Ltd, Donnie MacColl has worked for more than 20 years in the IT industry. He first specialized in the management of IBM i systems, (iSeries, AS400), in general manufacturing and logistics companies. Later on in his career Donnie was Network Manager for one of the largest telecommunications corporation in Europe.

He is regular speaker at international IBM events, including IBM Common in Europe and the USA, as well as the Interaction Conference in Australia.

Donnie specialises in advising companies on how to keep a tight control on the management of operations, critical processes, and core services across increasingly complex infrastructures and multi-platform environments.

He has worked with many industry sectors in his time at Halcyon Software to help improve cost efficiencies by implementing solutions in large European and US data centers in companies such as Computacenter, Parker Hannifin, Cap Gemini, Getronics, Logica, BGL Group (Budget Insurance), Arcadia and SunGard Public Sector.

Halcyon IBM i Product Suites

The following product suites are covered within this document:

Level 1 Message Management Suite



Our entry level suite for the IBM i. Closely monitor all your system messages, key applications and critical business processes.

Featuring:

- Message Monitoring
- FTP Monitoring
- TCP/IP Monitoring
- Output Queue Monitoring
- Device Monitoring
- Job Queue Monitoring
- SLA Reporting

Level 2 Systems Operations Suite



Monitor your IBM i system messages and automate the control of significant events.

All the features, of the Message Management Suite, plus:

- Object Monitoring
- Performance Monitoring
- Distribution Queue Monitoring
- User Profile Monitoring
- Inactivity Monitoring
- Audit Journal Monitoring
- Restricted Tasks Management

Level 3 Advanced Automation Suite



This level enables you to optimize performance, disk space and spool file management on your IBM i.

All the features of the Systems Operations Suite, plus:

- Performance Management
- Performance Snapshots GUI
- Disk Space Management
- Disk Space Explorer GUI
- Spooled File Management

Level 4 Operations Center Suite



Raise your operational control to the ultimate level. Contains all the functionality of the previous levels 1 to 3, plus the most advanced job scheduler available today.

Our flagship software suite contains all the features of the previous three suites, with the addition of:

- Advanced Job Scheduling



Halcyon Network Server Suite

Halcyon's Network Server Suite has been designed to provide a comprehensive monitoring solution to keep a close eye on all your critical servers, applications and devices across a multi-platform environment including Windows®, AIX® and Linux®.

How to use this document:

This publication is split into two chapters:

- Product Enhancements
- Product Fixes

Each of these chapters is then split in the following order:

- **Common Library**

These are enhancements and fixes that affect all products suites from Level 1 (Message Management Suite) through to Level 4 (Operations Center Suite).

- **Specialist Products** (listed alphabetically)

These are enhancements and fixes that affect individual products which are contained as modules in one or more of Halcyon's Product Suites.

For example, an enhancement to Audit Journal Manager is only applicable to Level 2 (Systems Operations Suite), Level 3 (Advanced Automation Suite) and Level 4 (Operations Center Suite).

- **Individual Change Reference**

Each enhancement and fix is prefixed with a CHGxxxx reference, where xxxx represents a combination of numbers and letters. Within both the Common Library and Specialist Product sections, each enhancement or fix is then listed in numerical and then alphanumeric Change Reference order.

Finding information in this PDF

From within Adobe® Acrobat® Reader®, use either the Search window (accessible from menu options; Edit | Search) or the Find toolbar (shown far right in the image below) to search document content.



Type the text that you wish to use for the basis of the search and press Enter.

We recommend using the CHG reference ID number (for example; CHG03RS), if known, within the Search or Find parameters as this text is unique within the document.

Need to confirm which Halcyon Products you have installed?

If you are unsure which Halcyon products you have installed on your system, type the following command onto the command line within your Halcyon environment:

DSPPRDINF

Alternatively, from within the Halcyon product menu, select option 70=Technical Information Menu followed by option 1=Display Product Information.

If you are still unsure, please contact: technicalservices@halcyonsoftware.com



Enhancements and Fixes

IBM i Product Suite Enhancements

The following enhancements have been made to Halcyon IBM i Product Suites between October and December 2012, covering releases IBM i: 2012.278 to IBM i: 2012.343.

Common Library - Actions

Reference: CHG050U Performance improvements made when Closing or Deleting an Alert with a Pending CONSOLE Action

Performance improvements have been made when attempting to close or delete an Alert that has an outstanding CONSOLE Action with a Pending status.

Reference: CHG053P SNMPTRAP Action message length increased

The SNMPTRAP Action maximum message length has been increased to 8192 characters.

Common Library - Action Schedules

Reference: CHG03X1 Rules can be directly edited from Action Schedule - Where Used display

Option 8=Where used from within Work with Action Schedules (WRKACTSCH) now has the ability to edit or display the Rules directly via new options:

2=Change

5=Display

Reference: CHG04ST Subject can now be specified on emails sent from an Action Schedule

From within Rules, it is now possible to specify the 'Subject' for an email which is sent via an Action Schedule.

A new parameter; 'Subject, if email' has been added to the Action Schedule Action within Rules. If set to *AUTO the default text is used. This is normally the Alert text. If a specific value is provided it is passed, but not necessarily used, to the Action Schedule for use on SNDTXT Actions for emails.

On Action Schedules, the 'Subject, if email' parameter for SNDTXT Actions now allows a value of *ACTSCH. If specified, the Subject text is determined by the value specified on the Rule. If it is not *ACTSCH, then the Subject is set according to the value set, regardless of the setting on the Rule.

Common Library - Auto Upgrade Solution

Reference: CHG051G Control Panel (CTLPANEL) entries can now be printed

The ability to print the Halcyon Auto Upgrade Solution Control Panel (CTLPANEL) entries has been added. This is available via new function key; F22=Print.

Common Library - Calendars

Reference: CHG0564 *DEFAULT Calendar can be automatically populated

The *DEFAULT Calendar can now be automatically populated. A new system default; HAL/CALAUTOPOPULATE controls how far into the future it is populated. The default setting is 5 years.

A check is made just after midnight by the Primary Action Monitor and if required the *DEFAULT Calendar populated.

When the *DEFAULT Calendar is populated, Monday to Friday is set on with the 'From time' parameter as defined in System Default HAL/CALDFTSTRTIME and the 'End time' parameter as defined in System Default HAL /CALDFTENDTIME.

Common Library - Exporting

Reference: CHG03S1 Export User Authorities supports FTPS

Export User Authorities (EXPUSRAUT) now supports use of FTP SSL (FTPS).

Reference: CHG056N Export functionality now checks remote Environment level

The various Export functions, such as Export Rule (EXPRULE), now check the PTF Level of the remote Environment before performing the Export. If both the Source and Target Environments are not at the same PTF Level the Export is abandoned. This is to prevent compatibility issues.

Common Library - Export Rules

Reference: CHG0535 Export Rule now support FTPS

Export Rule (EXPRULE) now supports use of FTP SSL (FTPS).

Please Note:

The parameters required to support FTPS are only available within '13=Export' from the Work with Rules (WRKRULES) display if you specify an actual system name rather than a Remote Location.

Common Library - Import Environment (IMPENV)

Reference: CHG04V7 FTPS support added

Import Environment (IMPENV) now supports the use of FTP SSL (FTPS).

Common Library - Installation

Reference: CHG04XI Performance improvements made to Event Manager Upgrade

The performance of the Event Manager upgrade has been improved.

Common Library - Monitors

Reference: CHG0503 Network Send Monitor now handles slow systems and connections

The Network Send Monitor has been enhanced to handle particularly slow systems or connections.

Common Library - Object Rules

Reference: CHG04R4 F4=Prompt added for 'Library' parameter on *LIB Rule

Object *LIB Rules now have the ability to use F4=Prompt for 'Library'.

Reference: CHG04XX *STMF Rule Type has been changed *IFS Rule Type

The Object *STMF Rule Type has been changed to *IFS as *STMF is not the only object type processed by the Rule.

Please Note:

When upgrading from a lower PTF Level, Object *STMF Rules will be automatically converted to the *IFS Rule Type.

Reference: CHG04XY Validation of 'Path' parameter on an *IFS Rule has been tightened

The validation of 'Path' for an Object *IFS Rule has been tightened.

Reference: CHG04XZ Validation of 'Path' parameter in Exclusions on *IFS Rule has been tightened

The validation of 'Path' within Exclusions on an Object *IFS Rule has been tightened.

Reference: CHG04Y0 New system default added to control messages for *IFS Exclusions

New system default HEM/OBJMONDIAG has been made available to control messages being added to the Halcyon Message Log by the Object Monitor for *IFS Rules. The following settings can be applied:

***NO** Do not add messages to the Halcyon Message Log.

***YES** Add a message to the Halcyon Message Log for each *IFS object not processed because of an Exclusion on an Object *IFS Rule; HEM0881 - Object excluded from rule OBJ xxxxxxxxxx nnnn

Reference: CHG04YL *RDCNT Rule behaviour changes when not authorized to object

Object *RDCNT Rules would previously error if they were not authorized to the object to which the SQL statement referred. This meant the Rule never alerted but no message was added to highlight this failure.

The Object Monitor should be running under QSECOFR adopted authority so that it does not fail. This has been changed.

Reference: CHG052C Object *RDCNT Rule Error added to the Admin Alert Criteria

Message HEM0846 is added to the Halcyon Message Log when the Object Monitor runs a SQL statement for an Object *RDCNT Rule which fails;

HEM0846 - Error(s) in SQL execution. Rule held.

This message has been added to Admin Alert Criteria (WRKADMALT) so that it is sent to the message defined in system default HAL /ADMINMSGQ.

Common Library - Performance Rules

Reference: CHG03IL *IN range can be specified on *SYSTEM CPUPCT Rules

Performance *SYSTEM CPUPCT Rules now allow an *IN comparison. *IN allows you to specify a 'From' and 'To' value which alerts if the CPU percent is *GE the lower value and *LE the higher value.

Reference: CHG04WJ Number of jobs allowed in a *JOB Rule has been increased

The number of job names that can be specified in a Performance *JOB Rule has been extended from 12 to 60.

The main Criteria screen now shows the first 11 job names with the 12th value now showing "More..." if more values have been defined. To show/edit more job names you can use new function key 'F16=More jobs' which opens a new window for all 60 values for job name.

Reference: CHG0545 STATCPU statistic has been added to *JOB Rules

Performance *JOB Rules now have statistic 'STATCPU' available. This new statistic allows you to specify comparisons and values for both STATUS and CPUPCT statistics, only Alerting if both are satisfied.

Common Library - Product Authorization

Reference: CHG04TN Product Authorization Code Deleted message now includes Environment

Message HAL0016, which is sent to the Admin Message Queue (System Default HAL/ADMINMSGQ) when an Authorization Code is deleted, now includes the Environment code from which it was deleted.

Common Library - Remote Locations

Reference: CHG03VT Remote Location Groups added for use in Exports

It is now possible to define Remote Location Groups. These are a list of multiple Remote Locations, for use within Export Rules (EXPRULE), Export Groups (EXPGRP) and Export User Authorities (EXPUSRAUT) options.

The Work with Remote Location Groups (WRKRMTGRP) command has been made available and has also been added as option 5 on the Halcyon Configuration Menu (HALCFG). As a result, the existing options have been renumbered accordingly.

Reference: CHG04R6 *I5 Remote Locations now store remote environment for use in Exports

*I5 Remote Locations now hold the code for the remote Environment. This means that the various Export functions, such as 'Export Rule' (EXPRULE), are now able to accept a Remote Location name rather than a system name and Environment code.

Reference: CHG04W6 Remote Locations Report includes 'Automatic Update' value

Print Remote Locations (PRTRMTLOC) now includes the 'Auto-update' value.

Common Library - TCP/IP Rules

Reference: CHG04T6 Option 9=Move Down added for TCP/IP Rule Actions

TCP/IP Rules now have option '9=Move down' available on the Criteria/Actions summary screen which can be used when the cursor is positioned in the Actions section.

Common Library - Work with Rules

Reference: CHG055G Groups and Rules can be held for a specific time period

The ability to automatically release a Group and/or Rule after a specific delay or at a specific time has been added. The 'Hold Rule' (HLDRULE) command now includes additional parameters;

Release

This parameter controls the automatic release properties of the Group/Rule.

- *NO Do not automatically release the Group/Rule. This is the default value.
- *AFTER Automatically release the Group/Rule after the delay specified.
- *AT Automatically release the Group/Rule at the time specified.

Date

The date the Group/Rule should be automatically released. The default value is *TODAY

Time

The specific time or delay until the Group/Rule is released as specified in HHMM format. The way this value is interpreted is determined by the value specified for the 'Release' parameter.

Examples:

- *AFTER 1430 - Release after 14mins 30secs
- *AT 1430 - Release at 2.30pm

To clear an automatic release, you must manually release the Group/Rule BEFORE the automatic release has been actioned. There is currently no way to see the details of when an automatic Group/Rule release is set.

Advanced Job Scheduler

Reference: CHG04V8 FTPS support added to Export Groups

Export Group (EXPGRP), and also option 31=Export within Work with Groups (WRKGRP), now supports FTP SSL (FTPS) via new 'Port', 'Secure connection' and 'Data protection' parameters.

Reference: CHG04W0 HLDGRP/HLDJOB/RLSGRP/RLSJOB now allow specific run to be specified

The following Advanced Job Scheduler commands now allow a specific time to be provided for 'Occurrence' (OCCUR) in HHMM or HH:MM format:

- ENDGRP End Group
- ENDSEQ End Sequence (Job)
- HLDGRP Hold Group
- HLDJOB Hold Job
- OMITSEQ Omit Sequence (Job)

RLSGRP Release Group
RLSJOB Release Job

Reference: CHG04X0 Schedule & Reports enhanced to show repeating and conditioned jobs

Work with Schedule (WRKSCH) now has the ability to show 'Forecast' Groups/Jobs. These are primarily Repeat Interval Groups/Jobs but can also include Invoke Groups/Jobs if invoked locally.

To include Forecast Groups/Jobs you must enable them within F18=User Options by setting the 'Show forecasted' parameter to 'Y'. Forecast Groups/Jobs are shown in blue in the Schedule.

Reference: CHG04X1 Command Lists support multiple commands within the actual job

Advanced Job Scheduler now supports Internal (*INT) Command Lists. Command Lists are a list of multiple commands to be run as a single Job thus preventing the need to use a Job per command.

Existing functionality allows you to add multiple commands within a source file member and then run them using a *CMDLST Job. This functionality has been extended to allow you define the multiple commands within the Job itself.

When you specify a *CMDLST Job, a new parameter 'Command List Type' is shown which supports the following values;

***INT** Internal command list. This is the default value
***EXT** External command list

***INT Command List**

If you set 'Command List Type' to *INT, multiple command lines are made available for you to provide the commands required to be run. You can change the order in which the commands are executed, change the commands themselves and delete commands already defined.

Please Note:

- The maximum length of a command on an *INT command list is 1024chars.
- The command entry lines are not long enough to show the full command. Please use F4=Prompt to enter, display and maintain the command if it is too long for the command line.

***EXT Command List**

If you set "Command List Type" to *EXT, you are prompted for the source file, member and ListID(s) to be run. This is exactly the same functionality as previously available.

Reference: CHG04X2 Default Job Recovery can now be defined at Job Environment level

The ability to define 'Default Job Recovery' at Job Environment level has been added. Previously the highest level for this functionality was at Group level.

Now you can leave the Default Job Recovery options for 'On First Error' and 'On Retry Error' parameters blank on a Group and the values are established from the defined Job Environment (page 4).

Reference: CHG04X5 FTP scripting enhanced to provide variable access to directory listings

Advanced Job Scheduler FTP Scripts now have the ability to provide Directory Listings via new function DIRLIST and new variable %DIR.

Using the DIRLIST function for a specified Path, returns a list of matching Directories and/or Files which is then accessed by using the %DIR variable. Each use of the %DIR variable returns the next match. If no more matches are found, then blank is returned.

Below is an example of how these could be used;

```
USER %1 %2
NAMEFMT 1
DIRLIST '/HALCYON/HALPROD/*.PDF'
REPEAT
SET P3='%DIR'
IF '%3' <> '' GET %3 %3 (REPLACE
UNTIL '%3' = ''
QUIT
```

Reference: CHG04XB Change Group command is now available

The Change Group (CHGGRP) command has been made available to allow changing of an Advanced Job Scheduler Group.

Reference: CHG0501 %LEN functionality is now available in FTP Scripts

Advanced Job Scheduler FTP Scripts now have new function %LEN available which returns the length of the string supplied.

Examples:

```
%LEN('ABCD') This returns 4
%LEN('%3') Returns the length of the value held in Variable 3.
```

Reference: CHG0502 FTP Script statements are trimmed when executed to allow indenting

The statements within an FTP Script are now trimmed before being executed. This allows you to use indentation on the statements for clarity.

For example:

```
USER %1 %2
NAMEFMT 1
DIRLIST '/Halcyon/HALPROD/*'
REPEAT
  SET P3='%DIR'
  IF '%3' = '' GOTO SKIP
  IF %SST('%3',%LEN('%3'),1) = '/' GOTO SKIP
  GET '%3' '%3' (REPLACE
:SKIP
UNTIL '%3' = ''
QUIT
```

Reference: CHG052T Submitted 'child' jobs can now be monitored

Advanced Job Scheduler now has the ability to track Jobs submitted by a Job submitted within Advanced Job Scheduler. An example of this is a Control Language Program (CLP) which runs SBMJOB commands to submit further jobs.

This is controlled using new parameter 'Monitor submitted job' for *SBMJOB Jobs:

- *FIRST** Only track the outcome of the *SBMJOB and the first job submitted by the *SBMJOB. This replicates existing functionality. This is the default value.
- *LAST** Only track the outcome of the *SBMJOB and the very last job submitted by the *SBMJOB.
- *ALL** Track the outcome of the *SBMJOB plus jobs submitted by the *SBMJOB. If the outcome in any of these cases is an error then the *SBMJOB is set to FAIL Status and Error Recovery actioned.

Example:

- *SBMJOB CALL PGM(QGPL/SBMMOREJBS)
 - Program SBMMOREJBS submits 3 more Jobs called JOB1, JOB2 and JOB3
 - "Monitor submitted job" *FIRST will FAIL if SBMMOREJBS errors or JOB1 errors.
 - "Monitor submitted job" *LAST will FAIL if SBMMOREJBS errors or JOB3 errors.
 - "Monitor submitted job" *ALL will FAIL if SBMMOREJBS, JOB1, JOB2 or JOB3 errors.

Reference: CHG054M *i5 Remote Location can be specified when using Export Group

Advanced Job Scheduler Export Group (EXPGRP) now allows you to specify an *i5 Remote Location instead of an actual System.

Reference: CHG0560 Commands added to lock and unlock Groups and Jobs

New commands have been made available which allow you to Lock and Unlock an Advanced Job Scheduler Group or Jobs:

- **LCKGRP** Lock Group
- **LCKSEQ** Lock Sequence (Job)
- **UNLGRP** Unlock Group
- **UNLSEQ** Unlock Sequence (Job)

Reference: CHG0570 Schedule historically populates days when system and/or Monitors are down

Advanced Job Scheduler now has the ability to populate the Schedule up to 7 days historically if the system/monitors have been down. This is controlled by new system default HJS/SCHEDULERCYDAYS. This system default has the following settings:

- *NONE** Do not populate the Schedule with historical Jobs. This is the same functionality as before and is the default value.
- n** Specify a value from 1 to 7 for the number of days to historically populate the Schedule. Groups/Jobs that should have run on the days previous to today will be populated.

Whether the historic Groups/Jobs, populated by this function, are run or not is controlled by System Default HJS/HOLDOVERDUE. If this system default is set to *YES they will be HELD and not run. If set to *NO, they are automatically set to run.

Audit Journal Manager

Reference: CHG03S7 Option 3=Copy added to Criteria/Actions screen

Audit Journal Manager Rules now allow copying of Criteria via new option 3=Copy.

Reference: CHG0408 'Access Type' parameter added to ZC Entry Type Rule Criteria and Alerts

Audit Journal Manager 'Object accessed – Change' (ZC) Rules now allow you to specify 'Access Type'. F4=Prompt is available to allow you to select the relevant code.

Reference: CHG0510 'IP address' parameter added to GR Entry Type Rule Criteria and Alerts

Audit Journal Manager 'Generic record (GR) Rules now allow you to specify 'IP address'.

Reference: CHG051H 'Access Type' parameter added to ZR Entry Type Rule Criteria and Alerts

Audit Journal Manager 'Object accessed – read' (ZR) Rules now allow you to specify 'Access Type'. F4=Prompt is available to allow you to select the relevant code.

Reference: CHG051I 'IP address' parameter added to PW Entry Type Rule Criteria and Alerts

Audit Journal Manager PW (Invalid password) Rules now allow you to specify 'IP address'.

Authority Swapper

Reference: CHG03U9 Profile swaps are now allowed between the same profiles

Authority Swapper now allows a Profile Swap to the same User Profile. This provides the ability to utilize the inbuilt command auditing via the Swap Session for a user.

Reference: CHG03UA Command Lists can now be used within other Command Lists

Authority Swapper Command Lists (WRKCMDLST) now allow you to include other Command Lists within. This allows you to define specified sets of Command Lists which you can then combine to make up another Command List which is then set against the Swap Profile.

This is achieved by setting the 'Opt' parameter to 'I' for Include and then either using F4=Prompt or manually typing in the name of the Command List within the 'Command' parameter.

Reference: CHG0529 Screens used during Swap Session can now be recorded and replayed

Authority Swapper now has the ability to record the actual screens used during a Swap Session and play them back for review. Swap Profiles now includes new field 'Enable screen capture' parameter which can be set to 'N' (No - Default value) or 'Y' (Yes).

When a Swap Session for a Swap Profile with the 'Enable screen capture' parameter set to 'Y' is used, the screens are captured and stored against the Swap Session. You are then able to display the screens used via new option '10=Screen captures' against the Swap Session.

This displays a list of the screens captured for that Swap Session which can be displayed using '5=Display'. Once a screen is displayed you can scroll through the other screen captures using Page Up and Page Down.

Reference: CHG054Q Display Screen Capture uses F11 to turn Page and Date/Time labels on/off

Work with Swap Session (WRKSWPSSN) Screen Captures now use F11 to toggle the red highlighted labels for Page and Date/Time Captured.

Disk Space Manager**Reference: CHG0521 F13=Repeat is now available on Work with Disk Analysis Builds**

Work with Disk Analysis Builds (WRKDSBLD) now includes the ability to repeat an option via use of new function key 'F13=Repeat'.

Document Management System**Reference: CHG04GG The Date and Time a Line or Sticky Note was Created/Amended now displayed in Work with Archived Spooled Files**

It is now possible to display the date/time a Line Note or Sticky Note was created and/or amended within an archived spooled file. New function key "F16=Info" has been added for this purpose within existing Line Notes and Sticky Notes.

Reference: CHG04I8 EMAILSPLF Action now supports AFPDS parameters

The Email Spooled File (EMAILSPLF) Action now allows you to specify parameters for emailing AFPDS spooled files. These are available within a new window which can be accessed using F10=Additional options:

- AFPDS page size name
- AFPDS page orientation
- Bookmarks
- Page range

Reference: CHG04VX Prevention of overlapping Sticky Notes

Overlapping Sticky Notes, within an archived spooled file, are no longer allowed.

Reference: CHG04ZF Generic values can now be used for Report Types in Segments

Bundle Segments now support the use of a generic value for the 'Report Type' parameter.

The following applies when using a generic value:

1. The Segment must be set to Optional (i.e. Required = *NO).
2. *KEY comparisons are not validated in any way.
3. A generic value is inclusive only - there is no way to 'Omit' a Report Type that gets picked up by a generic value other than to change the generic value so it no longer matches.

A Bundle that includes a Segment which has a generic value searches for any matching Report Types to the generic value and attempts to process them when the Bundle is run.

Reference: CHG051A *IN comparison added to Segments for use with ranges

Segment comparisons, within Work with Bundles (WRKBDL), now allow use of new comparison *IN to specify a range. The 'From' and 'To' parameter values should be separated using a colon (:) - meaning you cannot use *IN for a value that includes a colon.

This provides the ability to only use one line for a range comparison, as previously you would have had to use two, a *GE and a *LE comparison.

Examples:

Index Name	Comp	Index Value
COMNAME	*IN	COM2:COM3
BAUDRATE	*IN	15200:75200

Reference: CHG051F 'Status' column enhanced in Work with Archived Spooled Files display

Work with Archived Spooled Files (WRKARCSPLF) now shows the following codes within the 'Status' column:

- (*) Indexable archived spooled file. Indexes not built.
- (I) Indexes built.
- (M) Indexes built but the Report Type no longer exists or there are no longer any Indexes defined on the Report Type.
- (R) Indexes built but out of date and require rebuilding.

Reference: CHG051V Work with Bundles display now shows if a Bundle is currently being run

Work with Bundles (WRKBDL) now shows when a Bundle is currently being run by showing a 'Status' of 'Active'.

This is achieved by the Run Bundle (RUNBDL) and Run Segments (RUNSEG) commands registering the details of the Job that is running that Bundle and then clearing the Job details when the run is complete. To add reliability, in case of failure, Work with Bundles (WRKBDL) checks if the Job registered is currently active - and if not removes the registered Job details against the Bundle.

Please Note:

1. Work with Bundles (WRKBDL) DOES NOT allow you to run a Bundle that is in 'Active' status.
2. Run Bundle (RUNBDL) and Run Segments (RUNSEG) do not check for 'Active' status and DO ALLOW you to have multiple runs of the same Bundle/Segments running at the same time.
3. If you run a Bundle interactively and the Bundle run fails, the Bundle remains in 'Active' Status until you sign-out, as the registered Job is still active.

Reference: CHG052R Error message added for invalid data Index type in a Segment

Message HEM7632 is added to the Halcyon Message Log when a Segment contains a comparison value that is not valid for the Index type (i.e. a character value for a numeric Index). This message also includes the details of the value Type the Index was expecting (i.e. *NUM).

Reference: CHG052U Segment *LT/*LE/*GT/*GE comparisons now support character values

The following Segment *KEY comparison operators now support character values:

- *LT Less than
- *LE Less than or equal to
- *GT Greater than
- *GE Greater than or equal to

Reference: CHG0538 Sticky Note Templates now support Report Type of *NONE

Sticky Note Templates (WRKSTKTMP) now support the use of '*NONE' for the 'Report Type' parameter meaning the Sticky Note is then applied to archived spooled files which do not have a matching Report Type.

Message Communicator

Reference: CHG054Z Call Rota Projection added to determine active device on future dates

Work with Rotas (WRKROTAS) has a new option; 9=Project, which gives a basic projection of which Device will be active on the Rota on future dates.

Please Note:

Projection is based on a change time of midnight not the actual time specified in the Rota.

Reference: CHG055P Escalation Lists can now be repeated

Message Communicator Escalation Lists now include a 'Repeat list' parameter. The possible settings for this parameter are:

- N** Do not repeat the list after the last Device is processed, stop sending messages. This is the default value and replicates previous functionality.
- Y** Repeat the list after the last Device is processed. When the last Device has been processed a message is sent to the first Device on next Escalation and so on, in a continuous loop.

If set to 'Y', the only way to stop continuous processing of the Escalation List is:

- To Acknowledge the Alert. This cancels any outstanding Actions including continuing Escalation.
- To Close or Delete the Alert.
- To cancel the Escalation List within the Message Communicator Communications Log using '4=Cancel' against the *ESCLIST Device Type.

Performance Analyzer

Reference: CHG04V5 Performance Work with Job History functionality added

Performance Analyzer now includes option 12 =Work with Job History on the Performance Analyzer menu (HEMPFA) or via the WRKJOBHST command. This is an interactive version of the existing Print Job History (PRTJOBHST) report.

Work with Job History provides the following information about Jobs that have run or are currently running on the System;

- Job name
- Job user
- Job number
- Date entered system
- Time entered system
- Date started
- Time started
- Date ended
- Time ended
- Run time (hh:mm:ss)
- End code
- CPU seconds
- End Status

You can define the retention level for the history within 'Work with Performance Collection Levels' (10/HEMPFA) using new parameter 'Accumulate job history'. The following settings are available.

***NONE** Do not collect Job History. This is the default value.

1 to 366 The number of days to retain the Job History.

***NOMAX** Always retain Job History.

Please Note:

- Job history collection is dependent on an IBM Exit Point which becomes effective when a subsystem is started. All subsystems required to record job information must be ended and restarted. This may mean that an IPL is required.
- Job history collection is also dependent on the Performance Auxiliary Monitor, HEMPFX. You must restart the Performance Monitor for the Auxiliary Monitor to be started.

Reference: CHG050Q Work with Job History now supports 80 column displays

Work with Job History (WRKJOBHST) now supports 80column only displays. To accommodate this, the data presented is more restricted and the following message is displayed to advise this:

HEM0897 - Display limited to 80 columns. The display being used has a maximum of 80 columns. More information is available if you use a display with 132 columns.

Reference: CHG052G Work with Job History subset includes 'Active at' functionality

Work with Job History (WRKJOBHST) now includes the ability to only list Jobs actually active at the specified date/time range via use of new parameter 'Show active only' within 'F17=Subset'.

Reference: CHG052H Work with Job History now sorts by Subsystem

Work with Job History (WRKJOBHST) has been changed to sort by Subsystem and includes separators.

Spooled File Manager

Reference: CHG03VK F19=Submit to Batch now available when delete archive files

Work with Archives (WRKARCF) has new function key 'F19=Submit to batch' available on the Confirm Delete Archive screen.

Reference: CHG03YC Mass update of archived spooled file retention levels can be performed

Spooled File Manager now has the ability to mass update the retention levels on archived spooled files. The "Change Archive Retentions" (CHGARCRN) command accepts the following parameters:

Report type

The Report Type used to identify which archived spooled files are to be updated.

Retain days

The new value for the number of days to retain the selected archived spooled files;

nnn	The number of days
*DFT	Use the value from System Default HEM DFTARCRETAI
*NOMAX	Retain the archived spooled files indefinitely
*RPTTYP	Use the value on the Report Type

Generations to keep

The new value for the number of generations to retain;

nnn	The number of generations
*NOMAX	Retain the archived spooled files indefinitely
*RPTTYP	Use the value on the Report Type

Submit to

- *YES / *NO Whether to submit the update to batch rather batch than running it interactively

If you specify a value other than *RPTTYP for the 'Retain days' and/or 'Generations to keep' parameters, the Report Type is updated to that value so that any future spooled files matching the Report Type receive the same retention levels.

Reference: HG052Z Scripting supports spooled files up to 378 characters wide

Spooled File Manager scripting now supports spooled files up to 378chars wide.

Reference: CHG056G Reset option allows removal of *HSM tag in Work with Spooled Files

Work with Spooled Files (WRKSPLF) now includes the ability to reset the attribute set on a spooled file when it is processed by the Output Queue Monitor. This is possible using new option '26=Reset'.

For clarity purposes, Work with Spooled Files also includes a new column on View 1 on the far right titled 'A'. This shows "*" (asterisk) when the attribute is set on the spooled file.



Network Server Suite Enhancements

No enhancements have been made to Halcyon Network Server Suite between October and December 2012.



Product Suite Fixes

The following fixes have been made to Halcyon IBM i Product Suites between October 2012 and December 2012, covering releases IBM i: 2012.278 to IBM i: 2012.343.

IBM i Product Fixes

Common Library - Action Schedules

Reference: CHG055I Action Schedule SNDTXT action now correctly populates 'Subject, if email' value

An email sent from a SNDTXT Action on an Action Schedule with a value specified for the 'Subject, if email' parameter would not have the Subject set correctly. This has been fixed.

Reference: CHG050X CPYTOSTMF action no longer loses 'To stream file' path value upon saving

The CPYTOSTMF Action would incorrectly reset the 'To stream file' path to *AUTO when amended on a Rule or Action Schedule. This has been fixed.

Common Library - FTP Commands

Reference: CHG056Y Single quotes removed from internally used FTP commands

The Halcyon functions that use FTP, such as IMPENV, would include single quotes around the values for parameters. This could cause issues if you had a bespoke version of the FTP command so they have been removed.

Common Library - Installation

Reference: CHG054L SETUP no longer fails when file with long name exists in Environment

An upgrade of an Environment that had a physical file with a file name over 6chars in length would cause the upgrade to fail. This has been fixed.

Common Library - Output Queue Rules

Reference: CHG0546 Generic Group *DEPTH Rule now suspends as instructed

An Output Queue *DEPTH Rule was not suspending when specified. This has been fixed.

Reference: CHG054V OTRULES now exports Rules according to selections

'Output Rules' (OTRULES) was outputting all Rules in all Products regardless of the selections made. This has been fixed.

Common Library - Performance Rules

Reference: CHG04ZA *JOB EXISTS Alerts no longer raised when Subsystem is down and set to *ACTIVE only

Performance *JOB EXISTS Rules were raising Alerts when "Status" was set to *ACTIVE and the Subsystem was not active. This has been fixed.

Reference: CHG051C Acknowledge on alert from *JOB Rule now works correctly

In certain situations the Acknowledge against a Performance Monitor *JOB Alert was not working. This has been fixed.

Common Library - Port Forwarding

Reference: CHG0539 Port forwarding for alerts now working correctly

In certain circumstances port forwarding for Alerts was not working. This has been fixed.

Common Library - Remote Locations

Reference: CHG0562 Reply to remote *i5 CONSOLE now set to 50 characters

The reply to an inquiry Alert received from a remote *i5 location would be truncated to 40 characters. This has been fixed. The maximum length of a reply to an inquiry Alert is 50 characters.

Common Library - Substitution Variables

Reference: CHG04Z4 &MSGTXT Substitution Variable no longer returns null characters

The &MSGTXT Substitution Variable returned 1024 characters even if the message was shorter which resulted in 'junk' characters appearing at the end of some messages. This has been fixed.

Reference: CHG04Z5 &CR Substitution Variable is now correctly sent to a Remote Location

A SNDTXT Action to a Remote Location was incorrectly translating Substitution Variable '&CR' as ''. This has been fixed.

Advanced Job Scheduler

Reference: CHG045R Advanced Job Scheduler recovery improvements following major system failures

Improvements have been made in the way the Advanced Job Scheduler handles the recovery after major system failures, such as a power outage.

Reference: CHG04Y7 Replies to Inquiry messages with the same Message Key are now handled correctly

Advanced Job Scheduler was incorrectly handling responses to Inquiry messages when Jobs failed if the messages had the same Message Key. This is possible if an Inquiry message is deleted from a message queue and another Inquiry message arrives on the message queue.

The Message Key, assigned by the IBM i and used to uniquely identify the message, is re-used by the next Inquiry message that arrives on the message queue if the previous Inquiry message to arrive on the message queue was deleted - IBM i restriction.

Advanced Job Scheduler was not handling this situation. This meant that a Reply to an Inquiry message for a recently failed Job could also act as the Reply to a previously failed Job as the Message Key was the same on multiple failed Jobs. This has been fixed.

Reference: CHG04ZO Control Monitor no longer loops if system default HJS/INQMSGQ is using *DFT delivery

In certain situations the Advanced Job Scheduler Controlling Monitor (HJSCTL) would loop if the message queue to be used for Inquiry messages (System Default: HJS INQMSGQ) was set to *DFT delivery (Default reply). This has been fixed.

Reference: CHG0509 Groups can be expanded following PTF upgrade

Upgrading Advanced Job Scheduler from a PTF level of 2011.137 or below to a PTF level of 2012.152 or more recent, resulted in you being unable to expand Groups in Work with Groups (WRKGRP). This has been fixed.

Reference: CHG0518 Improvements made to Remote 'Condition' checking

Various improvements have been made to the Advanced Job Scheduler 'Condition' checking from a remote system.

Reference: CHG053L Changes to method by which 'User Profile is handled in Work with Groups

Work with Groups (WRKGRP) would error with 'User profile' issues if the user maintaining the Group/Job was not authorized to the specified 'User profile'.

The program that checks the 'User profile' has been changed to adopt QSECOFR Authority to prevent this issue.

Authority Swapper

Reference: CHG0523 HEM/AUTHSWAP User authority requires genuine authority

Work with User Authorities (WRKUSRAUT) was not deleting a User if you had swapped to an *ALLOBJ *SECADM User to maintain the user authorities. This was, correctly, due to the Job User having insufficient authority to revoke the HEM AUTHSWAP authority but it was, incorrectly, not checking if it was already revoked (ie. *UNDEF) meaning the delete was valid. This has been fixed.

HEM AUTHSWAP User Authority can only be changed by a User with genuine, not swapped, *ALLOBJ *SECADM authority.

Document Management System

Reference: CHG04GB Run Segment within Work with Bundles correctly updates Status

Work with Bundles (WRKBDL) was not refreshing the 'Status' from 'Ready-New' to 'Ready' within 8=Status on a Bundle after 9=Run had been used to run a Segment. This has been fixed.

Reference: CHG04K7 Correct Status now shown for archived spooled files in *INDEXED Archives

Work with Archived Spooled Files (WRKARCSPLF) was sometimes showing an incorrect Status (far right side) for archived spooled files within *INDEXED Archives. This has been fixed.

Reference: CHG04KN Correct headings now displayed in Work with Spooled File Indexes

The heading within Work with Spooled File Indexes (5/HEMHSM) would be set incorrectly after displaying an archived spooled file. This has been fixed.

Reference: CHG04PH 6=Print for Archived Spooled File needing Index rebuild removes highlight

Work with Spooled File Indexes (WRKIDXSPLF) would incorrectly remove the highlight against a spooled file that needed its indexes rebuilt when you used 6=Print. This has been fixed.

Reference: CHG04XG A Run Bundle failure on COMMAND Action for missing Index now sends a message to the Message Log

A COMMAND Action for Run Bundle (RUNBDL) would not add a message to the Halcyon Message Log explaining the reason for failure when it was due to a required Index no longer being defined against a Report Type. This has been fixed.

Reference: CHG04Y2 Run Bundle now runs correctly for 198 column archived spooled files

Run Bundle (RUNBDL) would fail if one of the archived spooled files was 198 columns. This has been fixed.

Reference: CHG04Y6 Recipient List now allows French character 'à' to be input

Various fields within Work with Recipient Lists (WRKRCPL) were only allowing UPPER case input thus preventing use of the French 'à' character (Code Page 297). This has been fixed.

Reference: CHG04Y8 It is no longer possible to create an unnamed Index

Work with Report Types (WRKRPTTYP) incorrectly allowed you to create a new Index without providing a "Name". This has been fixed.

Reference: CHG04YB It is no longer possible to add an empty Segment to a new or existing Bundle

Work with Bundles (WRKBDL) was incorrectly allowing you to add and save an empty Segment definition within a Bundle. This has been fixed.

Reference: CHG04YD Valid values for Rows and Columns are now displayed correctly in Sticky Note Templates

Work with Sticky Note Templates (WRKSTKTMP) was showing the valid values for 'Row' against 'Column' and for 'Column' against 'Row'. This has been fixed.

Reference: CHG04ZJ Work with Recipient Lists upper-cased values for 'Form Type' and 'User Data' parameters

Work with Recipient Lists (WRKRCPL) was incorrectly UPPER casing the values for the 'Form type' and 'User data' parameters. This has been fixed.

Reference: CHG0520 Work with Bundles no longer reports incorrect 'Empty' Status

Work with Bundles (WRKBDL) would incorrectly show a 'Status' of 'Empty' under some circumstances. This has been fixed.

Reference: CHG0527 Change in authority used to run Cache Group User Profiles

Cache Group User Profiles (CACHEUPRF) would error if the User for the Action Monitors did not have *ALLOBJ *SECADM Authority.

This has been fixed by changing Cache Group User Profiles (CACHEUPRF) to run as QSECOFR adopted authority.

Reference: CHG0520 Run Bundle *ALLNEW/*ALLRDY runs all Bundles even if one fails

Run Bundle (RUNBDL) for *ALLNEW and *ALLRDY would not run all available Bundles if any of them failed. This has been fixed.

Reference: CHG0530 Bundles no longer show 'Ready-New' status after changing a Change Recipient List within a Segment

Work with Bundles (WRKBDL) would incorrectly set the Status to "Ready-New" for a Bundle when you changed the Recipient List within a Segment. This has been fixed.

Reference: CHG0537 Changes to Segment 'Index Values' are now saved

Work with Bundles (WRKBDL) was not saving any changes you made to the 'Index Value' parameter in Segment comparisons if you left the other comparison fields unchanged. This has been fixed.

Reference: CHG053H Deleting a Sticky Note Template now deletes the correct template

Work with Sticky Note Templates (WRKSTKTMP) would incorrectly delete the first Template for the Report Type when you used option 4=Delete against a Template which was not the first one listed for the Report Type. This has been fixed.

Reference: CHG053V Sticky Note Templates now repositions the list after new addition

Work with Sticky Note Templates (WRKSTKTMP) was not repositioning the list of Templates after you used F6=Add to the newly added Template. This has been fixed.

Reference: CHG056X 80 column PDF incorrectly printed in landscape orientation

A PDF generated for an 80 column spooled file would include additional whitespace on the far right side which could result in it printing landscape instead of portrait when sent to a printer. This has been fixed.

Message Communicator

Reference: CHG04T5 Remote SNDTXT Escalation List now closes on closure of Alert

In certain situations a SNDTXT Action to a remote system Escalation List would not be closed when the Alert on the source system was closed meaning it would continue to escalate until no more entries on the Escalation List remained. This has been fixed.

Reference: CHG04YH Emails sent using *MSF no longer contain an extra MIME control line

In certain situations Message Communicator was incorrectly including an additional MIME control line in emails sent using *MSF. This has been fixed.

Performance Analyzer

Reference: CHG053C System performance *CPU '*DAYS' parameter now works correctly

Print System Performance Data (PRTPFMSYS) would only include data for Today if you used the *DAYS Interval for the Report. This has been fixed.

Restricted Tasks Manager

Reference: CHG04LA Change to exit routine from Console after maximum attempts at password

Restricted Tasks Manager Console requires you to provide the password when you use 'F3=Exit'. If you provided an incorrect password for the maximum attempts allowed you were then permanently stuck within the Console.

This has been fixed. Now, when you have used up all attempts for the password you will be signed off on use of 'F3=Exit'.

Reference: CHG052J Restricted Task run no longer stalls when a message sent to QCONSOLE Device

Restricted Tasks Manager was not handling messages sent to the device defined in IBM System Value QCONSOLE. This could result in a Restricted Tasks run stalling while waiting for the message(s) to be manually dealt with. This has been fixed.

Spoiled File Manager

Reference: CHG04F6 Print Report Types now displays the page header on every page

Print Report Types (PRTRPTTYP) was not including a page header on every page. This has been fixed.

Reference: CHG04JZ System Default HEM/SPLRTVUSRDTA now allows use of '*' in value

The System Default HEM SPLRTVUSRDTA (Retrieved spooled file user data) would not allow a value that included asterisk (*). This has been fixed.

Please Note:

The value specified for this System Default is applied to the 'User data' parameter on spooled files retrieved from an Archive. 'User data' allows any value and as such, if you wish no value to be set you need to specify *NONE in UPPER case or it will be treated as a literal value and applied.

Reference: CHG04T2 Error message corrected for non-existent tables within Print Tables

Print Tables (PRTTBL) had incorrect characters in the error message displayed if the requested Table did not exist. This has been fixed.

Reference: CHG04YE Subset Template no longer UPPER cases 'Form type' parameter

Work with Subset Templates (WRKSUBTMP) was incorrectly UPPER casing the value for the 'Form type' parameter. This has been fixed.

Reference: CHG04YF Subset Template now allows generic value for Program Name

Work with Subset Templates (WRKSUBTMP) was not allowing a generic value for 'Program name'. This has been fixed.

Reference: CHG04ZH Subset Template no longer truncates entry for 'Create System' parameter

Spooled File Manager "Work with Subset Templates" (WRKSUBTMP) allowed input of 10 characters for the 'Create system' parameter but then truncated the value to 8 characters which is the maximum length for this parameter. This has been fixed so that only 8 characters are permitted on entry.

Reference: CHG0516 ARCHIVE Action now removed from 'Pending' status if Library does not exist

An ARCHIVE Action would continuously get processed, fail, reset and attempt to be processed again by the Action Monitors if the Archive Library specified on the Action, or via the Report Type, did not exist. This has been fixed.

Now, the Action is stopped and message HEM7278 is added to the Halcyon Message Log.

Reference: CHG051S Copy Spooled File Action no longer fails when *NO Banner specified

A Copy Spooled File (CPYSPLF) Action would fail if the spooled file page size was too small for a Banner to be applied even when no Banner was requested to be set. This has been fixed.

Reference: CHG054G Archive to Archive owned by other Environment now gives correct error message

An attempt to archive a spooled file to an Archive owned by another Halcyon Environment would error but give an incorrect description of the error. This has been fixed.

Reference: CHG056B Complete content included in *SCS spooled file when archived

Under certain circumstances archiving a spooled file (*SCS) could result in some content being missing in the archived spooled file. This has been fixed.



Network Server Suite Fixes

No fixes have been made to Halcyon Network Server Suite between October and December 2012.

*****REPORT ENDS*****