



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

**Covering releases: March to June 2012**

**(IBM i: 2012.124 to IBM i: 2012.184 inclusive)**

**Publication Date: September 2012**

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## Foreword

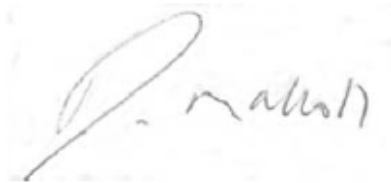
*By Donnie MacColl, Technical Services Director*

This update covers product enhancements and fixes between March and June 2012 for all Halcyon IBM i Software Suites.

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](mailto:technicalservices@halcyonsoftware.com)



# Enhancements and Fixes

## IBM i Product Suite Enhancements

The following enhancements have been made to Halcyon IBM i Product Suites between March and June 2012, covering releases IBM i: 2012.124 to IBM i: 2012.184.

### Common Library – Object Rules

#### **Reference: CHG03U6    Added ability to alert on a \*LIB rule type**

Object Rules now have Rule Type \*LIB available.

A \*LIB Rule allows you to check for the existence of a Library or a number of specific objects within a Library by object type and/or name.

#### **Reference: CHG04P9    Added ability to count records based on field values**

A new Object rule type of \*RCDCNT is now available.

A \*RCDCNT Object rule allows you to specify a SQL statement to select the records required to be counted within a file. You can then generate an alert based on the number of records returned.

The data for the fields returned by the SQL statement is ignored and only the total number of records returned processed. It is highly recommended that you select a single field within a file to improve the efficiency of the rule and so that lots of unwanted data is not returned each time the rule is run.

### Common Library – Output Queue Rules

#### **Reference: CHG04O1    End Column parameter added for Title test on a \*SPLF rule**

Output Queue \*SPLF Rules now include a new 'Ending column' parameter on the second page of the rule criteria as part of the title tests. Combined with the value set in the 'Starting column' parameter you can achieve the following different outcomes:

- Start: \*ALL / End: blank  
Find the 'Contains text' parameter entry anywhere on the specified line.
- Start: nnn / End: \*CALC (where nnn means a number between 1 and 256)  
Find the 'Contains text' parameter entry starting at the Starting Column which ends in the End Column calculated using the length of the 'Contains text'.
- Start: nnn / End: nnn (where nnn means a number between 1 and 256)  
Find the 'Contains text' parameter entry anywhere between the columns specified.

This allows you to check for text appearing anywhere on a line, starting at a specific column or appearing anywhere between specific columns.

## Common Library – Substitution Variables

### Reference: CHG04LY Underscore and period characters are now allowed in Substitution Variable names

The name of a Substitution Variable is now allowed to include underscore and/or period except as the first and/or final character of the variable name.

#### Valid Examples

&MY\_VAR  
&MY.VAR

#### Invalid Examples

&MY\_VAR.  
&.MY\_VAR  
&MY.VAR\_  
&\_MY.VAR

When the Substitution Variable name is resolved after the '&', the end of the variable name is now determined by the following logic:

1. When a semi-colon (;) is found.
2. When an invalid character for a variable name is found (not A-Z, 0-9, underscore or period).

If the resulting variable name starts with a character other than A to Z then it is considered invalid. If the variable name ends with underscore or period then the ending characters are discarded one at a time until no invalid characters remain. If the resulting variable name is more than 10 characters long, it is assumed to be normal text and not a variable name.

#### Example

"Error on system &THIS.SYS."

This would be resolved as variable name &THIS.SYS because;

1. " " is an invalid character thus making it: &THIS.SYS.
2. The variable name ends in period which would be discarded: &THIS.SYS

#### **Important**

As part of an upgrade to this release, existing use of Substitution Variables will be changed to include a semi-colon (;) at the end of the Substitution Variable name if it will cause the name to be resolved differently with this change. As an example; &ALERT.REPLY will be changed to &ALERT;.REPLY

This change applies within the following;

#### **Halcyon Common Library (HAL)**

- Action Schedule actions
- Action Templates
- Substitution Variables



**Audit Journal Manager (HAM)**

- Rule actions

**System Event Manager (HEM )**

- Rule actions
- Recipient \*STMF path
- Recipient List entry \*STMF path

**Advanced Job Scheduler (HJS)**

- Group actions
- Group Job default actions
- Job actions
- Environment Group default actions
- Environment Job default actions

**Message Manager (HMM)**

- Message Rule actions
- TCPIP Rule actions

**Restricted Tasks Manager (HRT)**

- Rule actions
- Command templates
- Group prestart message
- Group prestart command
- Group end system message
- Group completion command
- Task command

**Advanced Job Scheduler****Reference: CHG03SD    Export Group/Jobs option added to Work with Groups functionality**

Work with Groups now has the ability to Export a Group/Job to a remote system via new option 31=Export.

**Reference: CHG04LE    RTVHJSSTS command has been enhanced**

The Retrieve HJS Status command (RTVHJSSTS) now includes 2 additional parameters which are returned if an error occurred on the Job you check against:

**RTNERRID**      7 characters: The messageID of an error, if occurred.

**RTNERRMSG**    132 characters: The detail of the error, if occurred.

**Reference: CHG04MX FTP parameters have been modified to allow 128 characters**

Run FTP Script (RUNFTPSCR) now allows up to 128 characters for script variables.

**Reference: CHG04PE Only one Job in a Group allowed to run in the same second**

Advanced Job Scheduler now only starts one Job within the same second within the same Group.

**Reference: CHG04PM Interval Job now allowed to submit next occurrence on fail**

A failed Interval Job would not submit the next occurrence to the Schedule unless the error was ignored. However, this would result in the failed run not showing as such. To help with this issue a new option 'On Interval Error' has been made available on page 6 of a Group. This new field allows the following options:

- C** Cancel: Behaves as before. The Interval Group is set to FAIL and no more occurrences are automatically added to the Schedule for the day.
- G** Go: An inquiry message is sent for the failing occurrence and the next occurrence is added to the Schedule. Regardless of the reply to the inquiry message, the new occurrence will run at the requested interval unless manually prevented.

## Authority Swapper

**Reference: CHG04R0 Audit enhancement made to Swap Sessions Report**

The Swap Sessions Report simply output a line saying End of Report if no Swap Sessions were included on the Report.

This has been enhanced so that it now also includes the standard headings.

## Auto-Upgrade Solution

**Reference: CHG044W Upgrade Control Panel added**

The Halcyon Auto Upgrade Solution (AUS) now includes a Control Panel on the Source system to control which Environments are allowed to upgrade automatically from that system.

## Disk Space Manager

**Reference: CHG03YS Member parent File can now be retrieved**

The Halcyon Disk Space Manager Retrieve HDM Information (RTVHDMINF) command has been enhanced to include a new parameter called RTNOBJ (Returned Object) to provide the ability to retrieve the member parent file.

**Reference: CHG044H User can now be specified when scheduling ANZDSK in Quick Setup**

Disk Space Manager Quick Setup now allows you to specify the User Profile to be used for running the scheduled ANZDSK.

## Document Management System

### Reference: CHG04OG Sticky Note Templates can be used against archived spooled files

The Document Management System (DMS) now includes the ability to define Sticky Note Templates which are assigned to Report Types. When spooled files matching the Report Type are archived, the Sticky Notes, as defined in the Template, are automatically added.

### Reference: CHG04P1 Allow segment occurrence to distribute entire report on \*KEY

Segments, within Bundles, now allow you to specify \*KEY values to determine if the spooled file should be included in the Segment and \*ALLRPT for 'From occurrence' which means the whole spooled file is included in the Segment rather than just the pages matching the \*KEY.

#### Please Note

A \*REMAINDER Segment works by including pages from a spooled file that have not already been included in other Segments. If you specify \*ALLRPT as part of a Segment **before** a \*REMAINDER Segment, the \*REMAINDER Segment will always be empty as all the pages have already been included in a Segment.

### Reference: CHG04P6 RUNBDL/RUNSEG allow archived spooled file selection via Archive parameters

The Run Bundle (RUNBDL) and Run Segment (RUNSEG) commands now include archive parameters to allow you to specify a specific archived spooled file to be used for a Report Type.

- **Group** The Archive Group
- **Library** The Library containing the Archive Group
- **File** The specific Archive File within the Group
- **Member** The specific Member (ie. archived spooled file) to be used.

The information for these parameters is shown within Work with Archived Spooled Files on View 3.

### Reference: CHG04PS Options added to apply/revoke Sticky Note Templates within WRKARCSPLF

Within Work with Archived Spooled Files (WRKARCSPLF), new options have been added to allow you to apply or revoke Sticky Note Templates.

- **22=Apply sticky note templates**
- **23=Revoke sticky note templates**

To see these options use new Function Key F23 for More options.

### Reference: CHG04OR Sticky Note templates can be copied to multiple Report Types

The ability to copy Sticky Note Templates to other Report Types has been added.

## Message Communicator

### Reference: CHG04JK Dedicated \*EMAIL Auxiliary Monitors can now be defined

Previously, emails were only sent by the Primary Communications Monitor. This could cause delays if there were lots of emails to be sent or a particularly large attachment to be processed, such as a spooled file.

To help alleviate this situation it is now possible to create \*EMAIL Communications Resources which have a dedicated Auxiliary Communications Monitor assigned, in a similar manner to GSMs, NetGSMs and Modems.

Within Message Communicator it is possible to have a total of 9 Communications Resources which can be spread between GSMs, NetGSMs, Modems and \*EMAIL.

## Message Manager

### Reference: CHG04KL Comparison Data now allows the use of Date/Time message variables

Message Manager now allows Comparison Data to include a \*CV (Compare Variable) for a \*DTS (Date/Time stamp) variable.

You can enter the comparison as a simple comparison expression - for example;

&Variable or Posn and compare data or Type \*CT/\*CX/\*CA/\*CV and compare data or expression \*CV \*COMPVAR &11 <= '20130101235959000000'

## Record & Playback

### Reference: CHG04PZ Menu option added to provide access to Halcyon Record & Playback

The main Halcyon menu will now show option 30 to access Halcyon Record & Playback if you are authorized to the product.

## Spoiled File Manager

### Reference: CHG04IR 'User data' parameter entry is now case insensitive in Work with Spoiled Files

F17=Subset within Halcyon Work with Spoiled Files no longer treats User Data as case sensitive.

### Reference: CHG04NK Work with Archived Spoiled Files now displays Report Type

Work with Archived Spoiled Files now includes a column for 'Report type' on View 2. This allows easy identification of the relevant Report Type for an Archived Spoiled File even if it has no Indexes.



## Network Server Suite Enhancements

No enhancements have been made to Halcyon Network Server Suite between March and June 2012.



## Product Suite Fixes

The following fixes have been made to Halcyon IBM i Product Suites between March 2012 and June 2012, covering releases IBM i: 2012.124 to IBM i: 2012.184.

### IBM i Product Fixes

#### Common Library - Actions

**Reference: CHG04HQ EXPORT RULE now returns correct confirmation messages**

Export Rule (EXPRULE) now returns the correct confirmation messages.

**Reference: CHG04NA COMMAND Action no longer fails to resolve variables**

A COMMAND Action no longer fails if it includes Substitution Variables.

**Reference: CHG04OC AD-Hoc message with CONSOLE action in action schedule no longer corrupts alert text**

An Ad-Hoc message processed by Message Manager which actioned a CONSOLE Action via an Action Schedule could previously result in corrupted data in the Alert text. This has been fixed.

#### Common library – Action Monitors

**Reference: CHG04OY Resilience added to Action Monitors**

Additional resilience has been added to the Action Monitors to handle situations where many CONSOLE Actions to an Enterprise Console are being attempted simultaneously.

#### Common Library – Action Schedules

**Reference: CHG04KY Action Schedule with CLOSE Action now shows \*NONE**

An Action Schedule incorrectly showed a CLOSE Action as having option \*COMPNOERR when it is always \*NONE. This gave the false impression the Alert would not be closed if an error occurred. This has been fixed.

#### Common Library – Import Environment

**Reference: CHG04MN IMPENV no longer fails if remote system User doesn't exist on target system**

IMPENV would fail with an 'Object owned by QDFTOWN' error if you specified a User that didn't exist on the local system, only on the remote system. This has been fixed.

#### Common Library – Job Queue Rules

**Reference: CHG04JJ MOVEJOBS now releases held job if it becomes active**

In certain situations the MOVEJOBS action was incorrectly holding a job once it had subsequently become active and not releasing it again. This has been fixed.

## Common Library – Menu Options

**Reference: CHG04QV** Menu options are no longer blank on job CCSID 5035

The Halcyon menu options are no longer blank under CCSID 5035.

## Common Library – Output Queue Rules

**Reference: CHG04NU** Correct Alert text now applied when AFPDS spooled file found

An Output Queue Alert for an AFPDS spooled file incorrectly included; 'found with text "".' in the first level Alert text. This has been fixed.

**Reference: CHG04QU** &USRDTA Substitution Variable in alert text no longer causes EMAILSPLF failure

An EMAILSPLF Action would fail if you used Substitution Variable '&USRDTA' in the Alert text. This has been fixed.

## Common Library – Performance Rules

**Reference: CHG04O0** Correct alerting procedure now enforced for \*JOB sustained CPU

The Performance Monitor now alerts correctly for a \*JOB Rule monitoring for multiple occurrences over a time range.

## Common Library – Substitution Variables

**Reference: CHG04I7** Invalid Substitution Variable in F4=Prompt for COMMAND no longer deletes all entered parameters

Using F4=Prompt for a command within a COMMAND Action, and providing an invalid Substitution Variable against a command parameter no longer causes you to be returned to the COMMAND Action with only the command completed and none of the parameters set.

## Advanced Job Scheduler

**Reference: CHG044L** Change to how Delete Group/Job displays previous runs from Work with Schedule

Work with Schedule was incorrectly showing the Run History for a previous version of a Group/Job if that Group/Job had been deleted and then a new one created later. This has been fixed.

Now the Description shows as \*DELETED in Work with Schedule to indicate that the run related to a deleted version of the Group/Job.

**Reference: CHG04MQ** Unlocking a Job after a Group has run no longer causes display issue

The Work with Schedule display would incorrectly show a Locked Job with no Status, giving the impression it had been erroneously skipped, if it was Held before the Group was run but subsequently Unlocked. This has been fixed.

**Reference: CHG04Q7 FTP Script including Substitution Variables now passed correctly**

Substitution Variables used within a FTP Script were being passed incorrectly resulting in failure of the script. This has been fixed.

**Audit Journal Manager****Reference: CHG04OB PRTAUDJRNE - \*SUMMARY no longer fails**

In certain scenarios, a Print Audit Journal Entries (PRTAUDJRNE) \*SUMMARY report was failing. This has been fixed.

**Reference: CHG04OL PRTAUDJRNE - \*OUTSTMF now functions correctly**

Print Audit Journal Entries (PRTAUDJRNE) that are sent to \*OUTSTMF are now processed correctly.

**Document Management System****Reference: CHG04I4 Run Package now displays a message when there is no output**

Run Package was not displaying a message when no Packages were output. This has been changed. Now a message is always shown to indicate how many packages have been output.

**Reference: CHG04JG Bundle Header large print divider now displays correctly**

The Bundle Header was including a divider line above and below the large print Description of the Bundle which was too wide for the page resulting in it looking untidy. This has been fixed.

**Reference: CHG04NZ Correct value now highlighted for Index search in Display Archive Spooled File**

An Index search within Display Archived Spooled File now highlights the found match correctly.

**Reference: CHG04OD All Recipients now processed on Recipient List if Segment Headers \*NO**

A Recipient List is now processed correctly if Segment Headers \*NO is set.

**Reference: CHG04PT \*ALLRPT Segment now includes all pages**

A \*KEY Segment defined to include \*ALLRPT now includes the page on which the first match was found onwards rather than the entire source spooled file.

**Reference: CHG04PU Display Archived Spooled File allows overlapping Sticky Notes**

Sticky Note Templates allow you to define overlapping Sticky Notes and Display Archived Spooled File now displays them correctly if you attempt to Edit them.

**Reference: CHG04Q3 Special Instructions appear on Header page**

Segment Special Instructions now appear on the header page.



**Reference: CHG04Q5    Removed problems when archiving an IPDS spooled file with barcodes or graphics**

An archived IPDS spooled file would not be archived correctly. This has been fixed.

**Reference: CHG04R2    Email AFPDS spooled file now validates page size**

When emailing an AFPDS spooled file as PDF the Page Size parameter was not validated meaning that if you entered an invalid value the resulting PDF was incorrect. This has been fixed.

**Reference: CHG04R5    Display Archived Spooled File now functions correctly from Work with Spooled File Indexes**

Taking option 5=Display against an Archived Spooled File from within Work with Spooled File Indexes (5/HEMHSM) no longer fails .

**Reference: CHG04RF    CPYSPLF HSMMARK parameter now defaults to \*NO**

Copy Spooled File (CPYSPLF) has had the parameter 'New \*HSM mark' (HSMMARK) default value changed from \*YES to \*NO.

## Message Communicator

**Reference: CHG04NM    Long email body containing apostrophes no longer causes Monitor failure**

The Message Communicator Monitors no longer fail if they attempt to send an email when the text of the email contains a single quote and the message text is longer than 1,024 characters.

**Reference: CHG04RH    Internal files are no longer journaled**

Halcyon internal work files within Halcyon Message Communicator were incorrectly set to be journaled. This has been fixed.

## Message Manager

**Reference: CHG04H8    Changes made to handle more than 2,680 open Inquiry Alerts on a queue**

Previously, the Message Monitor would fail if there was more than 2,680 open Inquiry Alerts on a single message queue. A new handling procedure has been introduced.

Now, message HAL1124(see below) is added to the Halcyon Message Log and open Inquiry Alerts from 2,681 onwards are not checked to see if they can be closed as the message has been replied to outside of Halcyon.

HAL1124 - Internal error. User space overflow detected in HAL\_LSTALT

If you are likely to have more than 2,680 open Inquiry Alerts on a message queue it is advisable to use Admin Alert Criteria (WRKADMALT) to monitor for message HAL1124 with relevant actions to make you aware of the problem.

**Reference: CHG04L6 Monitor QHST no longer errors in GETQHST**

In certain situations the Message Monitor HMMMSG could fail while monitoring QHST. This has been fixed.

**Reference: CHG04Q0 Message Monitor now handles invalid message data in QHST message**

If a message on QHST had invalid data the Message Monitor (HMMMSG) could fail. This has been fixed.

**Performance Analyzer****Reference: CHG04Q0 Reports now follow specific Time selections**

In certain situations the Performance Analyzer Reports were not adhering to the specified Start and End time parameters. This has been fixed.

**Spooled File Manager****Reference: CHG04PN Work with Tables is now accessible from Menu**

Work with Tables, option 7 from the Spooled File Manager Configuration menu now opens and displays correctly.



## Network Server Suite Fixes

No fixes have been made to Halcyon Network Server Suite between March and June 2012.

\*\*\*\*\*REPORT ENDS\*\*\*\*\*