

TECH TALKS

With Frontier
Customer Support

Your Topics

For Your Success

Today's Topic: **The CSEC System and installing ECs**

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Agenda

- EC application consideration
- CSEC system review
 - What initiates an EC download
 - RPG or Java?
 - Do I need other ECs?
 - Download the source
- Apply the changes
 - Suggested environment setup
 - RPGLE EC application
 - JAVA EC application
 - Test the changes
- Promote changes to production

EC Application Considerations

- Do I need to install ECs manually?
 - Keeping current with cumulative releases is advised
 - Urgent issues require timely responses
- Upgrade needed?
 - 3.3 and below WAR file updates only done on latest cumulative release
 - 4.0 WAR files are independent of cumulative release
- Will EC be tested first?
 - Highly recommended
- Programming knowledge helpful, but not required
 - Friedman can install ECs via our Professional Services team – Estimates provided upon request

EC Notification

- Requested ECs via Helpdesk or CSEC system

From: Helpdesk
Sent: Monday, May 18, 2020 10:06 AM
Subject: EC 53270 is available

Notes: Enhancement/Correction number 53270 that your company requested has been completed, and is available for download from our Customer Support Enhancement/Correction system.
 Please connect to the EC system at your convenience to download the affected code changes.

If assistance with the installation of this or any EC is required contact our Professional Services Department at ProfessionalServices@friedmancorp.com

EC Description:
 Selection Date for AFP File Correction (DBC49175)
 will abend if there is a PO with a line item for a quantity large enough that when multiplied by the price is greater than the Detail Extended Amount (PLEXTS) holds and should not. DBC49175 is changed to correct this

- Notifications are sent to contacts designated as EC contacts
 - Helpdesk can add/remove contacts

- Bi-Weekly EC Notification

Dear Friedman Client,

Attached are listings of new ECs created during the last 2-week sprint, as well as all ECs completed and made available. Download or monitor the status of these EC's at <http://cswweb.friedmancorp.com/csec/>

If assistance with the installation of an EC is required, please login to the helpdesk portal at <https://friedmancorp.itclientportal.com/ClientPortal/Login.aspx> and create a new Training / Services Request to schedule some dedicated time for the Friedman team to either perform the install for you, or help you develop your internal EC install SOPs.

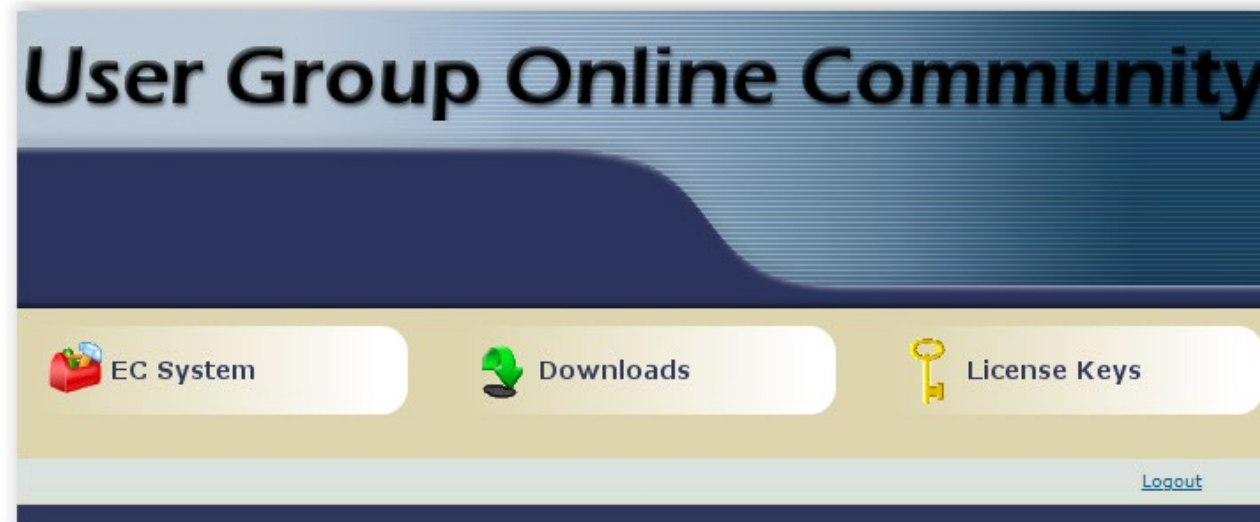
Severity ratings: 1 = System Down, 2 = Lack of function, 3 = Problem with a workaround, 4 = Cosmetic or Documentation change 5 = Product Enhancement

Completed Client ECs

EC	Severity	Date	Module	EC Description	Java/RPG
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CSEC System

- Accessed via friedmanusers.com
 - Self registration – Client code required
 - Must exist in contact database
 - Helpdesk can provide client code and add new contacts
- Fully documented in CSECWeb031.pdf manual



CSEC System

Last Sign-on: 5/19/20
Maintenance Expiration Date: 9/30/20
Frontier Release Level: 3.2

Select an Activity

Go

Search Criteria

Search Criteria:

<input type="checkbox"/> EC List	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> EC Range	From:	<input type="text"/>	To:	<input type="text"/>	
<input type="checkbox"/> Date	From:	<input type="text"/>	To:	<input type="text"/>	
<input type="checkbox"/> Application		<input type="text" value="Select One"/>			
<input type="checkbox"/> Program Name		<input type="text"/>			
<input type="checkbox"/> Word Search		<input type="text"/>			

Search Limits:

- ☐ Exclude All Requested EC's
☐ Include Only Requested EC's
- ☐ Exclude All Sent EC's
☐ Include Only Sent EC's
- ☐ Exclude Unavailable EC's

Max Severity

Clear

Search

CSEC System

- Settings – Control which ECs are seen based on your release level and other selections

Settings

Frontier release level	<input type="radio"/> 4.0	<input type="radio"/> 3.3	<input checked="" type="radio"/> 3.2	<input type="radio"/> 3.1	<input type="radio"/> 3.0	<input type="radio"/> 2.2	<input type="radio"/> 2.1	<input type="radio"/> 2.0	<input type="radio"/> 1.2	<input type="radio"/> 1.1	<input type="radio"/> 1.0	<input type="radio"/> 16.2	<input type="radio"/> 16.1
Exclude requested EC's	<input type="radio"/> Yes	<input checked="" type="radio"/> No											
Exclude sent EC's	<input type="radio"/> Yes	<input checked="" type="radio"/> No											
Exclude unavailable EC's	<input type="radio"/> Yes	<input checked="" type="radio"/> No											
Select related EC's for download	<input type="radio"/> Yes	<input checked="" type="radio"/> No											

Save

CSEC System

- Search criteria – Search for a range or specific EC, by application or program, or a word search

Search Criteria

Search Criteria:

☐ EC List

☐ EC Range

From:

To:

☐ Date

From:

To:

☐ Application

Select One ▼

☐ Program Name

☐ Word Search

Search Limits:

☐ Exclude All Requested EC's

☐ Include Only Requested EC's

☐ Exclude All Sent EC's

☐ Include Only Sent EC's

☐ Exclude Unavailable EC's

Max Severity

All ▼

Clear

Search

CSEC System

- Search results – Indicates if an EC is available or WIP
 - If in WIP, allows to be added to request list to receive notification upon release

Search Results

5 EC(s) Found
< Back Page: 1 of 1 Next >

Download	Request	EC #	Summary	Sev	Status	Date Added	Date Requested	Date Sent
<input type="checkbox"/>		53280	Clicking Inventory Audit File button in Inventory Issues and Receipts screen does not return inquiry results and should. Inventory Call IINVAUD (IINVAUDC) is changed to correct this.	2	Available	5/14/20		
<input type="checkbox"/>		53281	CADFlow will regenerate BOM for all lines on a QT type order which are unchanged. It should only regenerate for line items that are maintained.	2	Available	5/15/20		
<input type="checkbox"/>		53282	Planned Material Issues and Receipts (WO27) will allow the user to change the warehouse on a partial receipt SP report of the parent and should not.	3	Available	5/15/20		
	<input type="checkbox"/>	53283	On a numeric data type field, the custom Master file views will allow you to assign valid values but is not showing as dropdown selections in UI.	2	Quality	5/6/20		
	<input type="checkbox"/>	53284	Employee Master Maintenance will allow any single digit value for Shift number and should not.	3	Programming	5/6/20		

Submit

CSEC System

- EC detail – Shows EC description, objects changed, and related ECs

Search Results - Detail
Expand All

EC 53153

Download

Request

EC Number: 53153

Severity: 3

Status: Available

Database: N

Application: Order Processing UI

Version: 4.1

Added: 3/19/20

Requested:

Sent:

Object List:

Name	Type	Notes
EC-1754	JIRA	
FRESCO	WAR	V4.0.0.71
PRO4RD00	SQLRPGLE	ECS04001D

Summary:

The pricing warning message logic runs prior to the configuration logic finishing on line items in iProducts. This causes an invalid warning to show prematurely on pricing if the price is

Expand

Related EC's

Download	Request	EC #	Summary	Sev	Status	Date Added	Date Requested	Date Sent
<div> <div></div> </div>	<div> <div></div> </div>	51350	When matrix pricing is used and a specific value is not found in the matrix, the system will return a 0 price and NC code of '1' correctly. This EC adds a warning/advise to the user that no price	2	Available	1/22/18		

Submit

CSEC System

- Note the objects changed section
 - This will ensure all objects impacted are update

EC 51350 Summary Description

When matrix pricing is used and a specific value is not found in the matrix, the system will return a 0 price and NC code of '1' correctly. This EC adds a warning/advise to the user that no price was found.

OE UI - Read Existing Order (PRO4RD00) and Price Sales Order Detail Line Items (SUBRPR) updated to provide a warning that a pricing matrix entry was not hit and the line item price is currently 0.

DBC51350 was created to add the per code of 'E' to selectable values within the price per field in the UI. 'E' acts the same as blank in the price list.

To call DBC, navigate to system admin -> order processing database correction -> click on DBC 51350

PC changes cannot be downloaded from the CSEC system. Please visit www.friedmanusers.com to download the current version of the product.

EC 51350 Object List

Name	Type	Notes
CONFIGURE	WAR	V3.3.2.33
CONFIGURE	WAR	V4.0.0.1
EC-702	JIRA	
FRESCO	WAR	V3.3.2.33
FRESCO	WAR	V4.0.0.1
PRO4RD00	SQLRPGLE	ECS03301D
SUBRPR	RPGLE	ECS03301D

- Also important to expand the EC Description
 - May contain compile/DBC instructions
 - Will note if JAVA changes are part of the EC

CSEC System

- Download/Request queue – Processes download of the RPGLE source for the EC
 - Download or FTP are supported options
 - JAVA WAR files will be downloaded from friedmanusers.com

Download/Request Queue							
Download	Request	EC #	Summary	Sev	Status	Date Added	
<input checked="" type="checkbox"/>		51350	When matrix pricing is used and a specific value is not found in the matrix, the system will return a 0 price and NC code of '1' correctly. This EC adds a warning/advise to the user that no price	2	Available	1/22/18	<div> Select EC Retrieval Method ▼ <div> Select EC Retrieval Method <div> Download FTP SNADS </div> </div> </div>
						<input type="button" value="Update"/> <input type="button" value="Process"/>	

RPGLE Source

- Download direct to PC or via FTP
 - Sent as a SAVF
- FTP SAVF to iSeries
- Restore SAVF into an EC library
 - EC53150xxx – Library name where xxx = your client code
- Fully documented in CSECWeb031.pdf manual

JAVA ECs

- Additional considerations must be taken for JAVA ECs
 - WAR files are often related to each other
 - FRESCO and CONFIGURE must be at the same level
 - Other RPGLE ECs may be required

EC 51350 Object List		
Name	Type	Notes
CONFIGURE	WAR	V3.3.2.33
CONFIGURE	WAR	V4.0.0.1
EC-702	JIRA	
FRESCO	WAR	V3.3.2.33
FRESCO	WAR	V4.0.0.1
PRO4RD00	SQLRPGLE	ECS03301D
SUBRPR	RPGLE	ECS03301D

JAVA ECs

- Determine new WAR file level
 - EC object list will provide WAR file level

Name	Type	Notes
CONFIGURE	WAR	V4.0.0.75
EC-1836	JIRA	
FRESCO	WAR	V4.0.0.75

- Determine what WAR file level you are running

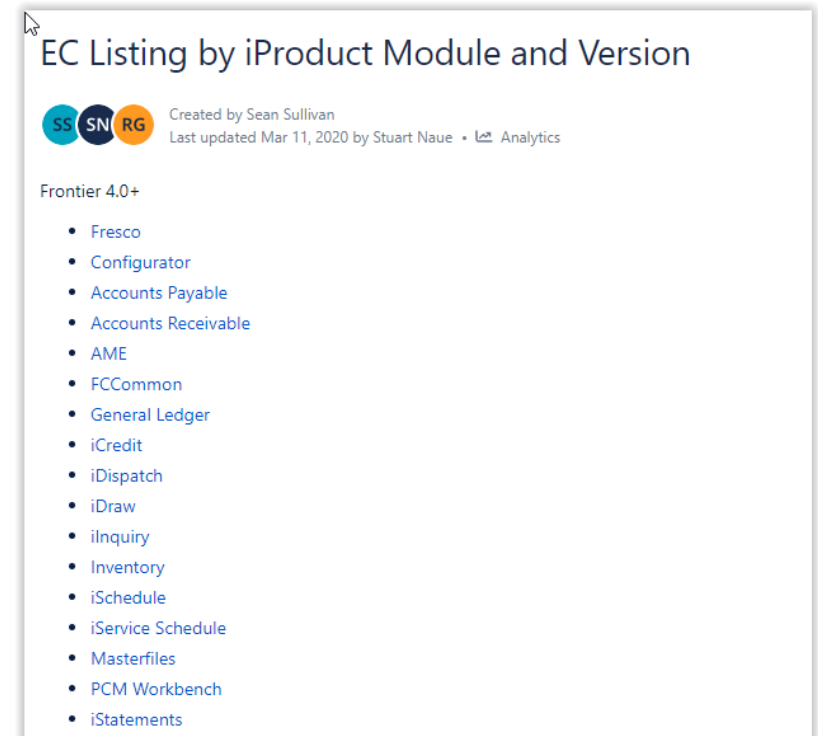


About iProducts

Inventory:	4.0.0.8C
APE:	4.0.0.71C
AME:	4.0.0.13C
iCredit:	4.0.0.5C
iConfigure:	4.0.0.71C
MasterFile:	4.0.0.40C
SOE:	4.0.0.71C
iDispatch:	4.0.0.13C
Common:	4.0.0.30C
iServiceSchedule:	4.0.0.6C
iServiceEntry:	4.0.0.71C
iSchedule:	4.0.0.15C
AR:	4.0.0.9C
AP:	4.0.0.16C
iInquiry:	4.0.0.37C
iDraw:	4.0.0.17C
GL:	4.0.0.1C

JAVA ECs

- Retrieve EC listing for WAR files
 - Confluence
 - <https://friedmantest.atlassian.net/wiki/spaces/TI/pages/498729026/EC+Listing+by+iProduct+Module+and+Version>
 - Helpdesk will grant access
 - Shared account by company is preferred
 - Profile disabled after 6 months inactivity



JAVA ECs

- Check for FRESCO ECs between 71 and 75

Fresco_V4.0.0.75	05-18-2020	EC	Description - Fresco 4.0.0.75 needs to go with Configurator 4.0.0.75	Java Projects	RPG Programs
		EC-1862 53276	Work Order Placement is bypassing launching the configurator if PCM Bypass WSS4 Option (AT29) data-area is Y and the initial configuration is complete.	OPUI	
		EC-1836 53255	The java implementation of the configurator executes COND-AS rules first, followed by model rules. The RPG rules engine does it in the opposite sequence. This EC enables the customer to specify which behavior to use so legacy PCM model setups will work with the new configurator. This EC introduces new IProducts property sequenceCondAs.	CFUI	
Fresco_V4.0.0.74	05-01-2020	EC	Description - Fresco 4.0.0.74 needs to go with Configurator 4.0.0.74	Java Projects	RPG Programs
		EC-1807 53230	52585 maintenance date sort issue	UI	
Fresco_V4.0.0.73	04-20-2020	EC	Description - Fresco 4.0.0.73 needs to go with Configurator 4.0.0.73	Java Projects	RPG Programs
		EC-1735 53132	Cross-site cookies need SameSite=none and Secure to be true or they will not work eventually in chrome	UI	
		EC-1798 53218	The order search initiated from the Purchase Order Header and Purchase Order Detail pages is no longer working when searching for requisitions.	iPUR	
Fresco_V4.0.0.72	04/03/2020	EC	Description - Fresco 4.0.0.72 needs to go with Configurator 4.0.0.72	Java Projects	RPG Programs
		EC-1771 53174	PCM Order Inspector Processing Control (AT10) causes Configuration Code Working Segment PF (WFP) records to be created for each sales order.	CFUI	
Fresco_V4.0.0.71	03/23/2020	EC	Description - Fresco 4.0.0.71 needs to go with Configurator 4.0.0.71	Java Projects	RPG Programs
		EC-1733 53125	If you clear the "Product" in Sales Order Detail page UI, it will return error "Warning - configuration error for line" for a stock product	OPUI	

JAVA ECs

- Also check for CONFIGURE ECs between 71 and 75

Fresco_V4.0.0.75	05-18-2020	EC	Description - Fresco 4.0.0.75 needs to go with Configurator 4.0.0.75	Java Projects	RPG Programs
		EC-1862 53276	Work Order Placement is bypassing launching the configurator if PCM Bypass WSS4 Option (AT29) data-area is Y and the initial configuration is complete.	OPUI	
		EC-1836 53255	The java implementation of the configurator executes COND-AS rules first, followed by model rules. The RPG rules engine does it in the opposite sequence. This EC enables the customer to specify which behavior to use so legacy PCM model setups will work with the new configurator. This EC introduces new iProducts property sequenceCondAs.	CFUI	
Fresco_V4.0.0.74	05-01-2020	EC	Description - Fresco 4.0.0.74 needs to go with Configurator 4.0.0.74	Java Projects	RPG Programs
		EC-1807 53230	52585 maintenance date sort issue	UI	
Fresco_V4.0.0.73	04-20-2020	EC	Description - Fresco 4.0.0.73 needs to go with Configurator 4.0.0.73	Java Projects	RPG Programs
		EC-1735 53132	Cross-site cookies need SameSite=none and Secure to be true or they will not work eventually in chrome	UI	
		EC-1798 53218	The order search initiated from the Purchase Order Header and Purchase Order Detail pages is no longer working when searching for requisitions.	iPUR	
Fresco_V4.0.0.72	04/03/2020	EC	Description - Fresco 4.0.0.72 needs to go with Configurator 4.0.0.72	Java Projects	RPG Programs
		EC-1771 53174	PCM Order Inspector Processing Control (AT10) causes Configuration Code Working Segment PF (WFP) records to be created for each sales order.	CFUI	
Fresco_V4.0.0.71	03/23/2020	EC	Description - Fresco 4.0.0.71 needs to go with Configurator 4.0.0.71	Java Projects	RPG Programs
		EC-1733 53125	If you clear the "Product" in Sales Order Detail page UI, it will return error "Warning - configuration error for line" for a stock product	OPUI	

JAVA ECs

- Items to watch for
 - ECs in blue or orange
 - Orange = Required
 - Blue = Optional
 - Green = All iProducts impacted

- EC numbers that have been distinctly color-coded contain either RPG and Java changes or have a related RPG EC. EC's marked in **orange** require that the RPG changes be put in place prior to installation of the Fresco WAR file. RPG changes for EC's marked in **blue** are only required when the EC is desired. The Java side of blue EC's will not have any impact when the RPG side is not loaded.
- EC numbers marked in **green** affect all iProducts. When updating to a version that has a green EC, all products should be updated to include the EC.

EC-830 51550	<p>Update Maintenance User fields in PF Sales Order Detail Line Items File (O6P), PF Sales Order Detail Billing Header File (O4P), and User ID in O6P on every revision, copy quote, move quote in eQuote.</p> <p>eProducts (eQuote) Create/Update Quote (EQTMNTHDR), Create All eProduct Stored Procedures (CRTALLEQT), eProducts (eQuote) Order Address Override (EQTADRUTL), eProducts (eQuote) Copy Existing Line Item (EQTCPTYTM), eQuote Resequence Lines When Converting (EQTCVTLIN), eProducts (eQuote) Order Entry Add Product (EQTORDADD), eProducts (eQuote) Complete Order (EQTORDCMP), eProducts (eQuote) Convert Order Part 2 (EQTORDCVT2), eProducts (eQuote) Order Entry Initial (EQTORDENT), eProducts (eQuote) Order Entry Extra (EQTORDENTX), eProducts (eQuote) Order Entry Create (EQTORDNEW), eProducts (eQuote) Order Entry Update (EQTORDUPD), eProducts (eQuote) Calculate Promos (EQTPROMOS), Send to Async Configuration (ICFGREPRC), and OE UI, Copy Order are changed to correct this.</p> <p>Stored procedure EQUOTE_MAINTAIN_QUOTE_HEADER must be recreated after installing this EC. Process the following on a command line. This command assumes 'FRNPGM040' is your stored procedure library. Change it if necessary. CALL PGM(CRTALLEQTC) PARM('FRNPGM040')</p>	EDEAL	@EQTMNTHDR CRTALLEQT EQTADRUTL EQTCPTYTM EQTMNTHDR EQTORDADD EQTORDCMP EQTORDENT EQTORDENTX EQTORDNEW EQTORDUPD EQTPROMOS ICFGREPRC PRO4FNCP	
EC-1600 52934	<p>When attempting to change the Ship warehouse for a sales order on the Sales Order Schedule screen, the system will abend with a decimal data error when Multiple Warehouses in the Order OE07 is set to N. OE UI Update Line Item Warehouse (PRO6FNWH) is changed to correct this.</p>		OPUI	PRO6FNWH

JAVA ECs





- Items to watch for (continued)
 - Other WAR files impacted
 - Will require reviewing EC listing for that application

Description - Configurator 4.0.0.62 needs to go with Fresco 4.0.0.62 and FCCommonApp V4.0.0.25

JAVA ECs

- Download WAR file(s)
 - ZIP contains 4 WAR files

Fresco_V4.0.0.73.zip	115404 KB	Apr 17 2020
Frontier Order Processing - Version 4.0.0.73		
Fresco_V4.0.0.74.zip	115405 KB	May 1 2020
Frontier Order Processing - Version 4.0.0.74		
Fresco_V4.0.0.75.zip	115411 KB	May 15 2020
Frontier Order Processing - Version 4.0.0.75		

 Fresco_V4.0.0.75.war	WAR File
 Fresco_V4.0.0.75A.war	WAR File
 Fresco_V4.0.0.75B.war	WAR File
 Fresco_V4.0.0.75C.war	WAR File

EC Application

- Highly recommend to install in a test environment and perform user testing
- Recommended library list for test environment

<u>10</u>	<u>FRNDEV040</u>
<u>20</u>	<u>CUSMOD040</u>
<u>30</u>	<u>FRNMOD040</u>
<u>40</u>	<u>FRNECS040</u>
<u>50</u>	<u>FRNPGM040</u>
<u>60</u>	<u>FRNTST040</u>
<u>70</u>	<u>QTEMP</u>
<u>80</u>	<u>QGPL</u>
<u>90</u>	<u>FRNSYSMAN</u>

FRNDEV040 – RPGLE ECs in testing – Not in production library list

CUSMOD040 – Customer coded modifications

FRNMOD040 – Frontier coded modifications

FRNECS040 – Frontier programs with installed ECs

FRNPGM040 – Frontier programs with base source code (no manual ECs)

FRNTST040 – Data library

- Designate a UI link for testing (A, B, or C) - Described later
- Friedman can assist with setting up test environment via our Professional Services team

RPGLE EC Application

- Entire source for the affected objects is sent – Do NOT compile this
 - This can contain other ECs that impact other object that are not included
 - Compiling download source can result in unexpected performance and data corruption
- Only RPGLE code is downloaded, related WAR files are retrieved as previously discussed

RPGLE EC Application

- Common object types / source files

Object Type	Source File
QHFAMSGF	QHFAMSGF
APPLE	QAPPLESRC
CLLE	QCLLESRC
CMD	QCMDSRC
DBCLE	QDBCLESRC
DSPF	QDDSSRC
LF	QDDSSRC
PF	QDDSSRC
RPGLE	QRPGLSRC
SQLRPGLE	QRPGLSRC

RPGLE EC Application (Test)

- Determine where current source exists
 - WRKOBJ
 - Option 8 on top object

Opt	Object	Type	Library	Attribute
—	SUBRPR	*PGM	ECS04001D	RPGLE
—	SUBRPR	*PGM	ECSPGM040D	RPGLE

```

Object . . . . . : SUBRPR      A
Library . . . . . : ECS04001D  O
Library ASP device . : *SYSBAS  L
Type . . . . . : *PGM        P

User-defined information:
Attribute . . . . . :
Text . . . . . :
ECS04001D ←
  
```

- Displays source library object compiled from
- This is the source you will apply to

RPGLE EC Application (Test)

- Following steps use STRPDM command
 - Training is available via our Professional Services team
- Copy source from current library to FRNDEVxxx library
 - Option 3

```
From file . . . . . : QRPGLSRC
From library . . . . : ECS04001D

Type the file name and library name to receive the copied members.

  To file . . . . .  QRPGLSRC   Name, F4 for list
    To library . . . .  FRNDEV040

To rename copied member, type New Name, press Enter.

Member      New Name
SUBRPR      SUBRPR
```

RPGLE EC Application (Test)

- Compare source objects
 - Will show all ECs in downloaded source
 - Option 54
 - Only for non-modified objects

```

Compare Physical File Member (CMPPFM)

Type choices, press Enter.

New file . . . . . > QRPGLSRC      Name
Library . . . . . > EC51350RWD    *LIBL, name, *CURLIB
New member . . . . . > SUBRPR      *FIRST, name, generic*, *ALL
Old file . . . . . *NEWFILE      *NEWFILE, name
Library . . . . . frnsr040      *LIBL, name, *CURLIB
Old member . . . . . *NEWMBR      *NEWMBR, name, *FIRST
                        + for more values
Compare type . . . . . *LINE      *LINE, *FILE, *WORD
Report type . . . . . *DIFF      *DIFF, *SUMMARY, *CHANGE...
Output . . . . . *              *, *PRINT, *OUTFILE
  
```

```

ID      SOURCE LINES
-----1-----2-----3-----4-----5-----6-----7-----8-----9-----
I -51372H* REL# 011 031318102634 JCK 51372#51372      180313
D -50831H* REL# 011 092117120449 JCK 50831#50831      170921

D -47437 * 47437 06/20/17 JCK Increase file data structures.
D -50775 * 50775 06/29/17 DB Pricing Discount GL alpha code enhancement.
D -46684 * 46684 07/31/17 JCK Replace free field usage.

I -51350 * 51350 01/16/18 FD Only set NCDD=1 when PER=N, otherwise it should
I -51350 *                                     be considered an error condition.
I -51372 * 51372 01/30/18 FD Accommodate lock of Y and R.
D -50831 * 50831 09/21/17 FD Discount GL alpha code should honor discount lock.
  
```

- First line can be ignored
 - Last programmed EC note
- Any “I” line with a different EC number indicates multiple ECs not in existing code
- Any “D” line with a different EC number or mod marking indicates downloaded source does not have all ECs installed on your system

RPGLE EC Application (Test)

- If compare only shows the downloaded EC is inserted and no other ECs or modifications are removed, you can copy the EC source over the FRNDEVxxx source
 - Option 3

```
Copy Members
From file . . . . . : QRPGLSRC
From library . . . . : EC51350RWD

Type the file name and library name to receive the copied members.

  To file . . . . . : QRPGLSRC   Name, F4 for list
  To library . . . . : FRNDEV040

To rename copied member, type New Name, press Enter.

Member      New Name
SUBRPR      SUBRPR
```

```
Type choice, press Enter.
Press F12=Cancel to return and not perform the copy operation.

Delete existing member . . . . . N Y=Yes, N=No

F12=Cancel

MA  A MW ^ 16/04
-01/1007 - Session successfully started
```

RPGLE EC Application (Test)

- If compare shows more than the downloaded EC, the EC source will need to be inserted into current source code
- Multiple ways to do this:
 - 2 screens and copy/paste
 - Split screen

RPGLE EC Application (Test)

- Split screen
 - Top source in edit mode = Current source code
 - Bottom source in browse mode = Downloaded EC source

```

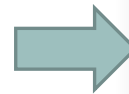
Columns . . . : 6 100                               Edit                               MGRAY/QRPGLSRC
SEU==>                                                SUBRPR
0303.00 * 52110 10/25/18 SG Update ODCDS$ when ODD$ is updated. 181106
0304.00 * 52101 10/29/18 FD Additional code to correct cost-plus pricing for multi-currency. 181107
0305.00 * 52418 04/17/19 SMK Discount amount incorrect in MLC when using a formula. 190923
0306.00 * 51914 08/26/19 FD Added code to perform rounding based on the PR81 value. 190925
0307.00 * Also added code to perform rounding on all prices after 190925
0308.00 * MLC rates are applied. 190925
0309.00 * 52838 09/23/19 FD Enhancement to add rounding factor H, round to nearest dollar. 190925
0310.00 F*~*****
0311.00 * HFA EXTERNAL IO REMOVED 920604
0312.00 * AND ALL DB FILE SPECS MADE UPDATE ADD 920604
0313.00 FPCL UF A E K DISK 920604

Columns . . . : 1 100                               Browse                               EC51350RWD/QRPGLSRC
SEU==>                                                SUBRPR
0288.00 50951 * partial backorders with a contract price. 170822
0290.00 51350 * 51350 01/16/18 FD Only set NCDD=1 when PER=N, otherwise it should 180117
0291.00 51350 * be considered an error condition. 180117
0292.00 51372 * 51372 01/30/18 FD Accommodate lock of Y and R. 180313
0293.00 F*~*****
0294.00 08296 * HFA EXTERNAL IO REMOVED 920604
0295.00 08296 * AND ALL DB FILE SPECS MADE UPDATE ADD 920604
0296.00 08296FPCL UF A E K DISK 920604
0297.00 08296FCC UF A E K DISK 920604
0298.00 08296FVT UF A E K DISK 920604

```

RPGLE EC Application (Test)

- Search EC source (browse) for the EC number
- Search current source (edit) for the location to insert code
 - Use preceding/succeeding lines
- Insert lines into appropriate spot
- Watch for commented out lines
- Repeat for all changed objects



```
1850.00 52101C  ##TK  ANDEQ  'QT11'
1851.00 52101C*50276  ##TK  OREQ  'QT11'
1852.00 50276C  ODPROT  ANDEQ  'Y'
1853.00 50276C  ODXTR2  ANDEQ  'C'
```

RPGLE EC Application (Test)

- Compile objects
 - Use Friedman's CRTOBJ command
 - Requires FRNSYSMAN in library list
 - Order of compile listed in CSECWeb031.pdf
 - Compile non-data objects into FRNDEVxxx
 - Compile data objects (PF, LF) into FRNTSTxxx

```

Create Object (CRTOBJ)

Type choices, press Enter.

Object name . . . . . > SUBRPR      Name
Object library . . . . . > FRNDEV040 Name, *DTAARA, *CURLIB, *LIBL
Object type . . . . . > RPGLE      RPG, RPGLE, CLP, CLLE...
Create Object As . . . . . > *PGM    *MODULE, *PGM
Debugging Views . . . . . > *ALL    *STMT, *SOURCE, *LIST...
Truncate Numeric . . . . . > *YES    *YES, *NO
Fix numeric . . . . . > *NONE    *NONE, *ZONED, *INPUTPACKED
Source listing options . . . . . > *SRCSTMT *XREF, *NOXREF, *GEN...
                                   + for more values
Default Activation Group . . . . . > *NO    *YES, *NO
Target release . . . . . > V7R1M0 Character value

Additional Parameters

Source file . . . . . > QRPGLSRC    Name, *DEFAULT
Library . . . . . > FRNDEV040    Name, *DTAARA, *LIBL
  
```


JAVA ECs (Test)

- Update the test UI link
- WebSphere console
- Click test UI link to view options

Enterprise Applications

Use this page to manage installed applications. A single application can be deployed onto multiple servers.

+ Preferences

Start Stop Install Uninstall Update Rollout Update Remove File Export Export DDL Export F

Select Name Application Status

You can administer the following resources:

<input type="checkbox"/>	frontier_3.2.0	➔
<input type="checkbox"/>	frontier_3.2.0A	➔
<input type="checkbox"/>	frontier_3.2.0B	➔
<input type="checkbox"/>	frontier_3.2.0C	➔
<input type="checkbox"/>	frontier_3.3.1	✖
<input type="checkbox"/>	frontier_3.3.1A	✖
<input type="checkbox"/>	frontier_3.3.1B	✖
<input type="checkbox"/>	frontier_3.3.1C	✖
<input type="checkbox"/>	frontier_4.0	➔
<input type="checkbox"/>	frontier_4.0A	➔
<input type="checkbox"/>	frontier_4.0B	➔
<input type="checkbox"/>	frontier_4.0C	➔

JAVA ECs (Test)

- Click manage modules

[Enterprise Applications](#) > [frontier_4.0B](#) > **Manage Modules**

Manage Modules

Specify targets such as application servers or clusters of application servers on the same application server or dispersed among several application servers. The plug-in configuration file (plugin-cfg.xml) for each Web server is generated.

Clusters and servers:

WebSphere:cell=S10604YM_WAS85SVR03,node=S10604YM_WAS85SVR03

WebSphere:cell=S10604YM_WAS85SVR03,node=S10604YM_WAS85SVR03

[Remove](#) [Update](#) [Remove File](#) [Export File](#)

☒ ☐

Select	Module	URI
<input type="checkbox"/>	FCCCommonApp	FCCCommonApp_V4.0.0.0B.war;WEB-INF/web.xml
<input type="checkbox"/>	iDispatch	iDispatch_V4.0.0.0B.war;WEB-INF/web.xml
<input type="checkbox"/>	iInquiry	iInquiry_V4.0.0.0B.war;WEB-INF/web.xml
<input type="checkbox"/>	AME	AME_V4.0.0.0B.war;WEB-INF/web.xml
<input type="checkbox"/>	iSchedule	iSchedule_V4.0.0.0B.war;WEB-INF/web.xml
<input type="checkbox"/>	iSvc	iSvcSchedule_V4.0.0.0B.war;WEB-INF/web.xml
<input checked="" type="checkbox"/>	Fresco	Fresco_V4.0.0.0B.war;WEB-INF/web.xml

[Enterprise Applications](#) > [frontier_4.0B](#)

Use this page to configure an enterprise application. Click the links to access pages for further configuring of the application or its modules.

Configuration

General Properties

Name

frontier_4.0B

Application reference validation

Modules

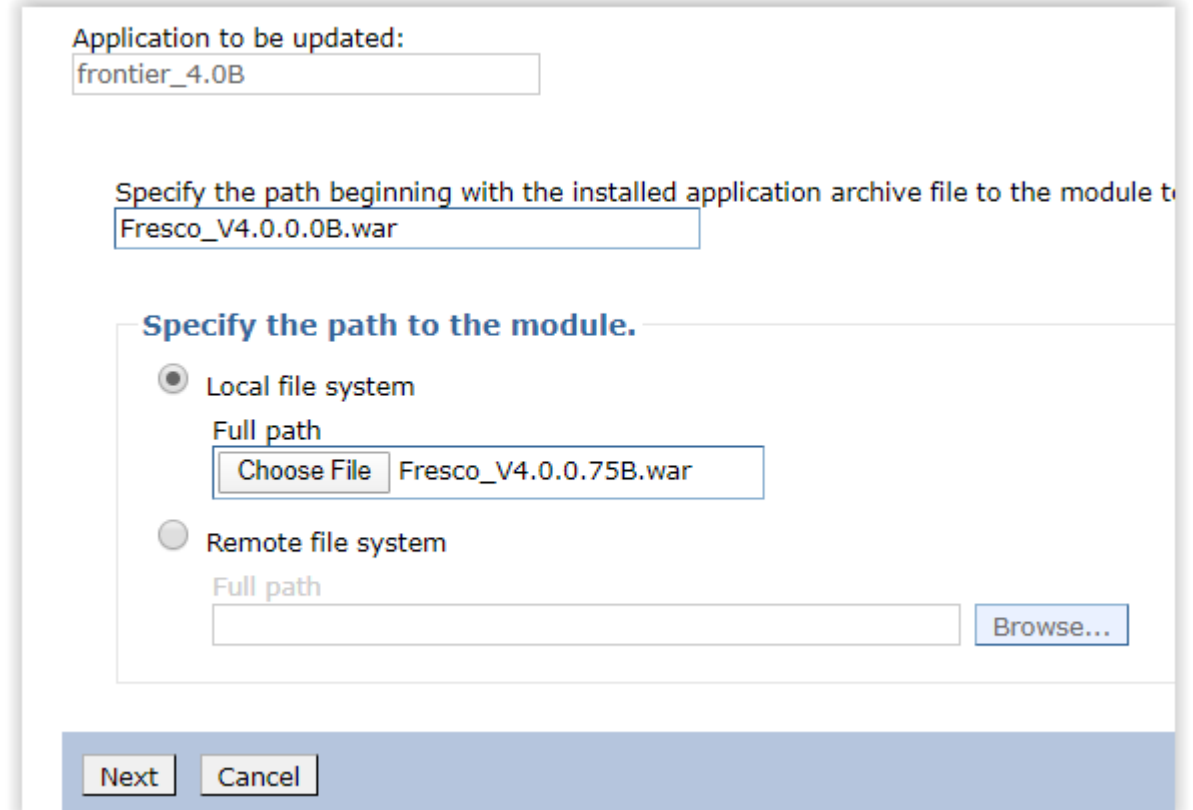
[Manage Modules](#)

[Display module build Ids](#)

- Select desired module and click update

JAVA ECs (Test)

- Select WAR file from extracted zip files
 - Make sure WAR file and link match
 - B.war goes with B link
- Click Next
- Follow default options



Application to be updated:
frontier_4.0B

Specify the path beginning with the installed application archive file to the module to
Fresco_V4.0.0.0B.war

Specify the path to the module.

☒ Local file system
Full path
Choose File Fresco_V4.0.0.75B.war

☐ Remote file system
Full path
Browse...

Next Cancel

JAVA ECs (Test)

Preparing for the application update

How do you want to install the application?

☒ Fast Path - Prompt only when additional information is required.

☐ Detailed - Show all installation options and parameters.

Specify bindings to use

merge new and existing bindings ▼

+ Choose to generate default bindings and mappings

Previous Next Cancel

Install New Application

Specify options for installing enterprise applications and modules.

→ **Step 1: Select installation options**

[Step 2 Map modules to servers](#)

[Step 3 Summary](#)

Select installation options

Specify the various options that are available for your application.

☐ Precompile JavaServer Pages files

☐ Deploy enterprise beans

☐ Deploy Web services

☐ Validate schema

Next Cancel

JAVA ECs (Test)

Install New Application

Specify options for installing enterprise applications and modules.

Step 1 Select installation options

→ Step 2: Map modules to servers

Step 3 Summary

Map modules to servers

Specify targets such as application servers or clusters of application servers where you want to install the modules that are contained in your application. Modules can be installed on the same application server or dispersed among several application servers. Also, specify the Web servers as targets that serve as routers for requests to this application. The plug-in configuration file (plugin-cfg.xml) for each Web server is generated, based on the applications that are routed through.

Clusters and servers:

WebSphere:cell=AUTODESKNode03Cell,node=AUTODESKNode03,server=server1

Apply

☒
☐

Select	Module	URI	Server
<input type="checkbox"/>	Fresco	Fresco_V4.0.0.38B.war,WEB-INF/web.xml	WebSphere:cell=AUTODESKNode03Cell,node=AUTODESKNode03,server=server1

Previous

Next

Cancel

Install New Application

Specify options for installing enterprise applications and modules.

Step 1 Select installation options

Step 2 Map modules to servers

→ Step 3: Summary

Summary

Summary of installation options

Options	Values
Precompile JavaServer Pages files	No
Deploy enterprise beans	No
Deploy Web services	No
Validate schema	No
Application name	frontier_4.0B
Cell/Node/Server	Click here

Previous








Finish

Cancel

JAVA ECs (Test)

- Upon completion of install, a save is required for master configuration
 - Multiple module updates can be done before a save is performed
 - A re-start is not always required

About iProducts

 Inventory:	4.0.0.7R
 APE:	4.0.0.75
 AME:	4.0.0.12
 iCredit:	4.0.0.5R
 iConfigure:	4.0.0.75
 MasterFile:	4.0.0.34
 SOE:	4.0.0.75

ADMIN50791: Update of frontier_4.0B has ended. The application or its web modules may require a restart when a save is performed.

Update of frontier_4.0B has ended. The application or its web modules may require a restart when a save is performed.

To start the application, first save changes to the master configuration.

The application might not be immediately available while being started on all servers.

Changes have been made to your local configuration. You can:

- [Save](#) directly to the master configuration.
- [Review](#) changes before saving or discarding.

To work with installed modules, click "Manage Modules."

[Manage Applications](#)

- Confirm installation by checking About iProducts

JAVA ECs (Test)

- UI uses stored procedures which can be impacted by an EC
- Test environment should use FRNDEVxxx for stored procedures
 - Initial Test environment setup should create all stored procedures (CRTALLAPI)
- Set on SPMENU option 14
- When EC requires a change to a stored procedure, the EC will give instructions
 - Replace library with FRNDEVxxx

Stored procedures library FRNDEV040

EC 51750 Summary Description

Enhancement to automatically lock promise dates after the order is booked. Provide a pop up window for the user the state whether the promise dates can be updated or not.

PC changes cannot be downloaded from the CSEC system. Please visit www.friedmanusers.com to download the current version of the product.

New stored procedure PRO6UNLCK is created by this EC. Process the following command to create the procedure. This command assumes FRNPGM040 is the name of your stored procedure library. Change it if necessary.

```
CALL PGM(CRTIFRESPR) PARM('FRNPGM040')
```

EC Testing

- EC application checklist
 - All non-data objects have EC code installed and compiled into FRNDEVxxx
 - All data objects have EC code installed and compiled into FRNTSTxxx
 - All WAR files are updated on designated testing link
 - All stored procedures are created in FRNDEVxxx
- Conduct User Testing
 - Power/Super Users should determine test scenarios
 - Any issues should be fully documented and sent to Friedman Helpdesk
 - Any DBCs should be run in Test and evaluated for accuracy
 - Test both EC specific issue as well as Quote to Cash flow to ensure functionality

Promote to Production

- Replace current source code
 - Locate current source code location
 - WRKOBJ option 8
 - Copy from FRNDEVxxx to current source code library
 - Repeat for all changed objects

```
Copy Members

From file . . . . . : QRPGLSRC
From library . . . . : FRNDEV040

Type the file name and library name to receive the copied members.

To file . . . . . QRPGLSRC Name, F4 for list
To library . . . . . FRNECS040

To rename copied member, type New Name, press Enter.

Member      New Name
SUBRPR      SUBRPR
```

Promote to Production

- Compile objects
 - Order of compile by object type in CSECWeb031.pdf manual
 - Recommended when no users on system
 - Locate current object library
 - WRKOBJ – Top member
 - Data objects (PF, LF) require compile into every environment (DTA, PCM, EDU)
 - Must be signed into that environment during compile or risk of crossed environments
 - Non-data objects compiled into current object library
 - Run any DBCs
 - Create any stored procedures
 - Update product UI link WAR files
 - User test in production

Promote to Production

- Once EC(s) is promoted, recommended to delete:
 - EC library (EC51350xxx)
 - Source code members from FRNDEVxxx
 - Objects from FRNDEVxxx
- This ensures a clean Development library for next EC install/testing

TECH TALKS

With Frontier
Customer Support

Your Topics

For Your Success

Thank you!

QUESTIONS