

# **VistA Integration Control Registration (ICR) Guide**



**Department of Veterans Affairs**

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# VistA Integration Control Registration (ICR) Guide

## 1. Purpose

The VistA (Veterans Health Information Systems and Technology Architecture) Integration Control Registration (ICR) Guide was created by the VistA Office to provide guidance to product teams who develop a product containing a reference to a software component which is outside the product's application boundary (namespace). ICRs are required to document integration agreements between the custodial package owning the software component, and the subscribing package wanting to access it.

The VistA Office Change Management Pillar provides an ICR Team who oversees the management of ICR agreements.

## 2. Target Audience

The target audience is any product team responsible for developing, enhancing, or maintaining a product which interfaces with VistA:

- VA Office of Information Technology (OIT) Class 1 product teams
- VA OIT field offices and field (Class 2 and 3) product teams
- Business-partners external to the VA (Class 3) product teams

Product team includes individuals with roles such as Product Manager, Developer, Analyst, Support, Software Quality Assurance analysts and Stakeholders.

## 3. Assumptions

The terms Product and Package are synonymous in this document. Historically, Package is used when the product is based on M code and a Package Patch is used to distribute the product.

The term “package” is used throughout VistA file structures that manage patch distribution and document integration agreements in FORUM. For consistency, “package” is used regarding patches and ICRs in this document.

Several reference documents will be referred to in this document and can be accessed from the References and Related Links section of this document.

The Massachusetts General Hospital Utility Multi-Programming System (MUMPS) programming language will be referred to as M code in this document.

## 4. Background

VistA software has over 150 unique Class 1 Packages with Released Patches containing software components which are owned by each Package. The package releasing the software component, within their defined application boundary, is the “Custodian Package”. The custodian package’s software component can be used by another package, called the “Subscribing package”, if the custodian package approves the access. The approved access to the software component is defined in an integration agreement.

The authoritative source for integration agreements between two packages are the ICRs stored in the INTEGRATION REFERENCES file (#50055.1) in FORUM. The external references between two or more packages are documented in over 7500 ICRs in FORUM.

The VA enterprise goal is that all interfaces with M packages in the VA will have an approved ICR to document integration between packages.

For products without M patches (web, GUI, Middleware applications), there still must be an ICR approval for the access to VistA data using remote procedure calls.

Additionally, if any product’s access method to VistA does not respect VistA Authorized Boundaries, then the product’s access method must be reviewed and approved by the following 2 groups:

- OIT DSO SPM Health Vista Office Information Assurance at [OIT-EPMO-HPS-VISTA@va.gov](mailto:OIT-EPMO-HPS-VISTA@va.gov)
- VA OIT Infrastructure Dev. & Doc. at [InfrastructureDevDoc@va.gov](mailto:InfrastructureDevDoc@va.gov)

## 5. Package Class and ICRs

OIT DevSecOps Software Product Management (SPM) uses the word “Product” to define the products managed by SPM. Each Product is associated with a Product Line. Most products managed by SPM are primarily Class 1 “Packages”.

Packages are categorized as Class 1, Class 2, or Class 3 in the PACKAGE File (#9.4) in FORUM, which is the authoritative source for defining a package’s boundaries and Package Class. If the Package CLASS field is Class 1, then a patch can be distributed out of FORUM after meeting all software standards and convention required by DevSecOps for Class 1 products. For more information about Package classes, please refer to the VistA Package/Namespace Setup Guide link provided in the References and Related Links section of this document.

In all classes of ICRs, before the patch can be tested in a production environment, the patch routines must document all external references according to the M Programming Standards by referencing the ICR number matching the external reference. The M Programming standards and Conventions document link is found in the References and Related Links section of this document.

## 5.1. Class 1 Package ICRs

Historically, ICRs document agreements between two or more Class 1 packages. An ICR agreement between Class 1 packages is a “contract”. The contract means:

- The Custodian Package **will not** make a change to the ICR software component which is not backward compatible with the existing use of the software component by the Subscribing Package.
- If the Custodian Package must change the ICR, impacting the current Subscribing Package, then the Custodian Package must coordinate the change so both packages can apply coding changes and coordinate delivery of changes for distribution. Upon successful coordination between the Custodian and Subscribing package developers, the ICR will be changed accordingly.
- If the Subscribing Package needs to change the ICR, an ICR Request is used to share a mockup of the ICR changes needed. The Custodian and Subscribing package subject matter experts (SMEs) evaluate the request. If the Package SMEs approve, the ICR is changed accordingly.
- There are cases when a Custodian Package SME is no longer available to review and approve an ICR request. In this case, the Product Line Manager responsible for the Custodian Package, will be asked to provide a point of contact (POC) to review the ICR. If a POC is still not available, then the ICR Team will consider approving subscription with a “Document Only” designation in the Subscribing Details of the ICR with an explanation of why the package needed access to this ICR. “Document only” approvals are appropriate if the request is reasonable and/or based on similar package subscriptions to the ICR.

For Class 1 Packages, ICRs must be approved before the product goes to Initial Operating Capability (IOC), which means ICRs must be approved before the patch is installed in a production environment for user acceptance testing (UAT).

Before a Class 1 patch goes to IOC, the patch must also pass the OIT SPM SQA review process. The OIT SPM SQA review process includes an ICR review in the SQA Checklist. The ICR review includes an M code review to validate:

- The appropriate ICR is referenced to match the external reference in the M code, to comply with the M Programming Standards and Conventions.
- The ICR in FORUM is updated with the Subscribing Package related to the patch.
- The ICR is active in FORUM.

A Patch passes the ICR portion of the SQA review when the ICRs are correctly documented in the patch routines and the ICR definition in FORUM.

The SQA review does not pass the patch if ICR issues are unresolved. During the SQA review, the SQA reviewer documents all ICR issues it finds so the developer can address all known ICR issues in the next patch iteration sent for SQA review.

## 5.2. Class 2 and Class 3 Package ICRs

Class 2 and Class 3 Packages do not go through the OIT SPM SQA review process that Class 1 packages must pass, before going to IOC.

However, M code in patches is required to pass SQA review by the Field Enhancement and Sustainment (FES) team **before** the patch can be installed in the field.

FES SQA review requires M routines to include references to the ICRs matching the external references in the patch routines.

The main difference between ICR SQA for Class 1 packages and ICR SQA for Class 2 and 3 packages is there is no SQA check to verify if the:

- Subscribing Package is a Subscriber of the ICR, and
- ICR is active in FORUM.

This is because historically the ICRs defined in FORUM represent a contract between Class 1 packages. Class 2 and Class 3 packages are not usually added as subscribers because of the potential misrepresentation of a contract between the Class 1 package and the Class 2 or Class 3 package.

As a result, there are many ICRs referenced in M routines installed at sites throughout the VA enterprise which have not been approved for use by Custodian Package SMEs, even though the routine passed SQA review by conforming to the M programming standards and conventions.

In the instance of Class 2 and 3 packages, there are some situations where the ICRs have been documented in FORUM as Subscribing packages on a “Document Only” basis with a clear designation of the package being “Document only - Class 3”, negating the Class 1 contract.

## 6. ICR Team Role

The VistA Office Change Management Pillar provides an ICR Team who oversees the management of ICR agreements. The ICR Team can be reached for questions related to ICRs by sending a message to the OIT DSO SPM Health VistA Office Integration Control Registrations Mailgroup at [icrs@va.gov](mailto:icrs@va.gov).

The ICR Team’s role is to:

- Assist product teams having questions related to ICRs needing to be added to FORUM.
- Assist product team members to determine which ICR best matches the external reference access in the package’s routine.
- Facilitate reaching agreements between Custodian and Subscribing Packages resulting in documented and approved ICRs in FORUM.
- Provide and maintain the new ICR Request Intake Form and ICR Request List Sharepoint tools – Available April 2022 (see the ICR Request Intake Form Section of this document)
- Receive ICR Requests from the Custodian or Subscribing Package SMEs (after submitting an ICR Request Intake Form), which is sent to [icrs@va.gov](mailto:icrs@va.gov) in an Email message.

- Review original ICR Request content and requests more information if needed on the ICR Request's Email message string.
- Add developer SMEs, for the Custodian and Subscribing Package identified in the ICR request, to the message string with a request to review for concurrence. The ICR Team will provide a mockup of the "SUBSCRIBING DETAILS" which could be added to the ICR, for historical documentation.
- Track discussion activity related to the ICR request message string until the request is approved, denied (with alternative approach), or withdrawn.
- Update the ICR Request item in the ICR Request List to reflect the incremental status of the ICR request (e.g., Assigned, Custodian review, Subscriber review...).
- Update the ICR status in FORUM, including Deactivation (to edit the ICR to make the status "Under Revision") and Activation upon approval.
- Update the ICR Request item in the ICR Request List with final status.
- Update the ICR Request List to attach a copy of the ICR Request message string related to the ICR request for historical access by any Product Team.
- Provide monthly list of redacted ICRs to FOIA for use by WorldVistA to provide ICR definitions outside the VA firewall.
- Provide monthly redacted ICR report to developers not having access to FORUM, upon request.
- Provide example of an ICR Spreadsheet for product teams to use to track ICR Requests through the completion of the ICR in FORUM. This is helpful if the product team is managing over 10 ICR Requests related to a patch (with multiple iterations).

## 7. Product Team Role and ICRs

Product team developers must determine the following:

1. What kind of product is being developed (web-based, GUI, M-based)?
2. What interface mechanism will be used based on the interface requirement section defined in the VistA Reference Guide's Interface Requirements section?
3. Are VistA's Authorized Boundaries defined in the VistA Reference Guide being respected in the new product design?
4. What deviations from the VistA Reference Guide interface requirements are being planned? This requires approval from OIT DSO SPM Health Vista Office Information Assurance at [OIT-EPMO-HPS-VISTA@va.gov](mailto:OIT-EPMO-HPS-VISTA@va.gov) before proceeding with a design.
5. What information will the new product access from another package to support the new product functionality?
6. What information will the new product update in VistA files owned by another packages?
7. What ICRs in FORUM already exist to which the new product's package could subscribe?



8. What new ICRs need to be created and requested for approval if an ICR doesn't exist?
9. Has an ICR Request been submitted in an ICR Intake Request Form, to review and approve each new ICR or modify and subscribe to an existing ICR? The submission will automatically send an Email message to the OIT DSO SPM Health VistA Office Integration Control Registrations team at [icrs@va.gov](mailto:icrs@va.gov) and other recipients added to the ICR Request. Add additional contacts, as needed, to the Email message string after the ICR Request is submitted.
10. Have all ICR references been documented in the routines to comply with the M Programming Standards and Conventions?

## 8. Product Team Role and other VistA Resources

The ICRs defined in the INTEGRATION REFERENCES file (#50055.1) in FORUM are one resource for accessing information related to ICRs. The VA Software Document Library (VDL) provides Technical Manuals which are a great resource to identify common Routines and Remote Procedures documentation. The new VistA Reference Guide is resourceful for reviewing "Interface Requirements" to ensure the VistA Authorization Boundary is respected.

Nationally released OIT DevSecOps SPM VistA software reference information is available by following the links in the References and Related Links Section of this document to access the following:

- VistA Reference Guide and Supporting Documents
- VA Software Document Library (VDL)
- VA EA VistA Dashboard
- VistA Monograph
- VA System Inventory (VASI)

## 9. ICR Definitions in FORUM

Each ICR in FORUM:

- Represents an integration agreement that defines a software component, owned by a Custodian Package, and subscribed to by one or more Subscribing Packages.
- Documents specifics about the Custodian Packages software component
- Documents specifics about what and how the Subscriber package accesses the software component
- Documents what is the Subscribing Package functionality that made this agreement necessary.

Each ICR has a "Type" field which dictates the fields which must be entered to document the ICR for use by the Subscribing package:

- File (names the file, global reference and fields accessed)

- Routine (names the tags and input and output variables)
- Remote procedure (work with the ICR Team to add the Remote Procedure into FORUM)
- Other (The description is used to details the access needed.)
  - Option,
  - Protocol,
  - Parameter (adding Parameter in the Package namespace), or
  - software components not covered elsewhere

The ICR is owned by the Custodian Package specified in the ICR, even though a Subscribing Package may have added the ICR.

Each Product defined in a Product Line has developer SMEs who are experts for the Product and are familiar with the Package software components. The Custodian Package SME has the authority to determine if it is appropriate for a package to Subscribe to the Custodian's ICR.

## 10. Process for entering an ICR

The following are typical steps to consider if the product team has identified an interface access that may need a new ICR entered in FORUM

- 1) Get access to FORUM. The following is a link with instructions to request access to VistA FORUM: [Self-Service - FORUM/IFCAP/EIE/CIO: Access Requests for FORUM and VistA IFCAP - Hines Stations, CIO Station 776 and EIE Station 116 \(va.gov\)](#). Request access to the Software Services Primary Menu (A2A SOFTWARE SERVICES MENU). No security keys needed.
- 2) First search current ICRs to see if there is already matching ICR, or closely matching the interface access needed by the Subscribing package.

### **ICR Lookup Tool**

The ICR Process and Standards Sharepoint Page at [ICR Process and Standards \(sharepoint.com\)](#) provides a link to a new ICR Lookup tool, [ICR Lookup \(va.gov\)](#). This tool was created recently by FES to help developers validate if an existing ICR matches the Subscribing Package needs. This tool is easy to use by specifying search criteria to get a list of ICRs matching the search criteria. Then the tool allows quick access to view the content of each ICR listed. The ICR output is a field-by-field output for each ICR. This tool is significantly easier to use than using FORUM to search for ICR matches. However, developers need to be aware the ICR data comes from a database copied from FORUM in the middle of every month and redacted for use by FOIA, so the data returned could be missing up to a month of ICR activity. It is recommended to use the ICR Lookup tool to search for ICR matches generally but use the FORUM ICR Lookup for current ICR content.

The ICR Lookup tool designates the Usage of Supported, Controlled Subscription and Private. To find an ICR match, start with Supported ICRs in the list returned, then Controlled Subscriptions, and finally Private subscriptions.

### **FORUM ICR Lookup**

Follow the steps below to do a lookup on ICRs in FORUM:

1. Select the DBA MENU from the Software Services Primary Menu option prompt
2. Select the INTEGRATION CONTROL REGISTRATIONS . . . option from the DBA MENU option prompt
3. Select the Inquire to an Integration Control Registration option from the INTEGRATION CONTROL REGISTRATIONS Option prompt.
4. At the INTEGRATION REFERENCES: prompt, enter text to search for (including an existing ICR number, or routine name, or file name, or global reference). The lookup is using all the FileMan cross-references defined for the INTEGRATION REFERENCES files to search for matches.

The list of ICRs returned provides the ICRs matching the search. Each ICR must be selected to get the full ICR inquiry output. The FORUM inquiry output is the ICR format that Custodian developers expect to see for discussion purposes.

- 3) The Subscribing Package developer should work out the details of a new ICR before entering the ICR in FORUM. Some Subscribing Package developers create a mock-up of the ICR content and share it in an email message with the Custodian Package SMEs to get feedback before adding the ICR in FORUM. The Custodian Package SME may respond with a redirect to use another ICR (e.g., use an existing routine type ICR instead of a new direct file access ICR) or make other recommendations which will be useful when entering the ICR in FORUM. The ICR Team can provide a Custodian Package SME to use as the ICR Point of Contact (POC).
- 4) A Product team member (often developer) adds the ICR in FORUM. To add an ICR, follow the steps below:
  1. Select the DBA MENU from the Software Services Primary Menu option prompt
  2. Select the INTEGRATION CONTROL REGISTRATIONS . . . option from the DBA MENU option prompt
  3. Select the ADD/EDIT Pending Integration Control Registration option from the INTEGRATION CONTROL REGISTRATIONS Option prompt.
  4. Accept the ICR number shown at the Select INTEGRATION REFERENCES: nnnn// prompt. This ICR number is the next ICR number available to use to create a new ICR. Hit return to continue creating the new ICR and the FORUM user logged in will automatically be added as the Editor for the ICR.
  5. Answer each prompt to complete the ICR definition. Hint: Inquire to other ICRs to get examples for content and level of detail expected for the type of ICR.
  6. The ICR will stay as 'Pending' and can be edited by the user in the future until the ICR is 'Activated'.
  7. After all the ICR definition updates are entered in FORUM, the new ICR is ready for a review by the ICR Team and the Custodian and Subscribing package SME. This is done by selecting the ICR Request Intake Form link from the [ICR Process and Standards \(sharepoint.com\)](https://sharepoint.com) Sharepoint page, to submit an ICR Request. When completing the form, the Description box should include the details of why this ICR is needed to satisfy product functionality and to what patch will the ICR be effective. Then include a capture of the new ICR's FORUM Inquiry output in the Description also, highlighting the text needing to be added/edited. Use "paste as plain text" to paste the capture, then select the captured ICR inquiry text and change the font to Courier to retain the ICR inquiry format

for consistency and readability. The submitted ICR Request creates an email message which will be used to capture the approval by the Custodian package SME. Once the approval is granted in the message string, then the ICR Team will activate the new ICR, and mark the ICR Request as completed.

## 11. ICR Process and Standards Sharepoint site

The VistA Office has created a new ICR Process and Standards SharePoint page to provide guidance related to all things related to ICRs: [VistA Office ICR Process and Standards SharePoint Page](#)

This SharePoint page will continue to evolve as the ICR team obtains new references, links and tools to assist developers with the ICR process.

The SharePoint page currently provides links to the following:

- ICR Request Intake Form
- ICR Request List (Status)
- ICR Guidance and Useful Information
  - Link to this VistA ICR guide
  - ICR Process Overview
  - ICR Request Intake Form Guidance
  - ICR Request List Guidance)
- Useful Links which includes
  - ICR Lookup Tool
  - M Programming Standards and Conventions (SAC)
  - VA Software Document Library (VDL)
  - Process Asset Library (PAL)
  - VA Acronym Lookup
  - VA Systems Inventory (VASI)
- Quick Links to PAL Development Documentation
  - VistA National Patch Module Guide
  - VistA Primary Developer Review Checklist
  - VistA Secondary Developer Review Checklist
  - SQA Checklist
  - VistA Verifier Checklist

## 12. ICR Request Intake Form

The VistA Office, Change Management pillar, ICR Team created the ICR Request Intake Form to better track ICR Requests and generate metrics for reporting to VistA Office leadership. The ICR Request Intake Form is the starting point for requesting an action to be taken on an ICR. Each ICR Request submitted from the ICR Request Intake Form is available to view from the ICR Request List (discussed in a section below).

## 12.1. How to Access the ICR Request Intake Form

The Edge or Chrome internet browser is recommended to access the ICR Request Intake Form. Internet Explorer will not work with this Intake Form.

Users can access the ICR Request Intake Form link from the following Sharepoint pages:

- VistA Office Customer Portal Sharepoint Page [VistA Office Customer Portal \(sharepoint.com\)](#)
- ICR Process and Standards Sharepoint Page [ICR Process and Standards \(sharepoint.com\)](#)  
Note: The ICR Team recommends the user save this link to the user's Favorites folder.

Users can also use the ICR Request Intake Form (direct link): [VistA Office - Integration Control Registration \(ICR\) Request Intake Form \(sharepoint.com\)](#)

## 12.2. ICR Request Intake Form – Blank Form

An ICR Request is submitted to the ICR Team using the ICR Request Intake Form.

Typically, one ICR Request should be entered for each ICR.

The ICR Intake Request should include information about what activity needs to occur related to the ICR:

- Questions about an ICR
- Review, approval, and activation of a new ICR
- Add new Subscribing Package to an existing ICR
- Add new Subscribing Package and request modifications to an existing ICR
- Existing Subscribing Package needs to modify an existing ICR definition
- Custodian Package needs to modify an existing ICR definition. Note: ICR contracts between Class 1 packages, so any change needs to consider the impact on existing Subscriber Packages.

**Figure 1: ICR Request Intake Form – Blank Form**

Title of Request	<input type="text"/>	
Date of Request	12/1/2021	
Requestor	<input type="text"/>	
Project Manager	<input type="text"/>	
Additional Recipients (GAL Entries)	<input type="text"/> <input type="text"/> <input type="text"/>	  
Additional Recipient Email(s)	<input type="text"/>	
Detailed Description of Request		
<input type="text"/>		
IOC Date	<input type="text"/>	
Project	<input type="text"/>	
Patch(es)	<input type="text"/>	
ICR Number	<input type="text"/>	
Custodial Package	<input type="text"/>	
Subscribing Package	<input type="text"/>	
Software Class	<input type="text"/>	
Type	<input type="text"/>	
'Other' Type	<input type="text"/>	
<input type="button" value="Submit"/>		

## 12.3. Instructions to fill out the ICR Intake form

Listed below are detailed directions to fill out the ICR Request Intake Form. Some fields may appear to be duplicates of information entered within the text of the Detailed Description of Request fields, but the separate fields are used to build the columns in the ICR Request List, [VistA Office - ICR Request List - All Items \(sharepoint.com\)](https://sharepoint.com) which can then be used to sort and search ICRs using column filters.

**TITLE OF REQUEST:** (Required) Enter the title of the request. The Title of Request should contain the ICR Number (if known), and brief text of the action requested. Examples of Title of Request are:

- "Request Activation of New ICR 6340" or
- "Request Modification of ICR 3731" or
- "WebVRAM Request to Subscribe to ICR 1629 XWB GET VARIABLE VALUE"

**DATE OF REQUEST:** This field is autogenerated to be the current date.

**REQUESTOR:** (Required) Enter the Requestor's name. Entering the Requestor's name can be performed by entering the full VA-associated email or enter name with the format "Lastname, Firstname", or use the browse function of the People Picker located to the right of the field.

The Requestor can optionally add other product team members that will receive the ICR Request's email message generated upon submittal. The requestor could also include the Custodian or Subscriber developer that the product team may have coordinated with and explain who the coordinated roles between the Custodian and Subscribing Package in the Description. Note: As an alternative to using the additional recipient fields in this form, the requestor can add additional recipients to the message string created by the ICR Request submission.

Other recipients the Requestor can include:

**PROJECT MANAGER:** Enter the Project Manager's name. Entering the Project Manager's name can be performed by entering the full VA-associated email, or enter name with the format "Lastname, Firstname", or use the browse function of the People Picker located to the right of the field.

**ADDITIONAL RECIPIENTS (Global Address Lookup (GAL) ENTRIES):** Enter up to 3 Additional Recipients who can be found in the GAL and need to be informed on the email message string related to this ICR request. Additional Recipients from the GAL can be added by entering the full VA-associated email or enter name with the format "Lastname, Firstname", or use the browse function of the People Picker located to the right of the field.

If more than three GAL recipients need to be added, then add them to the Email message To or Cc list, AFTER the ICR Request is Submitted.

**ADDITIONAL RECIPIENT'S EMAIL(S):** Enter the Additional Recipient's Email(s) for individuals not found in the GAL (such as Class 2 or Class 3 developers). Email entries in this field should contain the full email address. An example of an Additional Recipient's Email is [DEVELOPER.THREE@EXAMPLE.COM](mailto:DEVELOPER.THREE@EXAMPLE.COM).

**DETAILED DESCRIPTION OF REQUEST:** (Required) Enter a Detailed Description of Request. The ICR Requests can be general questions to the ICR Team or requests for actions to be taken for a new or existing ICR in FORUM.

If the ICR Request is regarding ICR actions, then the following information should be included

- What project needs this ICR
- What patch needs this ICR
- Pertinent background information about the functionality provided by the package which caused the need for the ICR
- Which Custodian package SME or Subscriber package SME was coordinated with before entering the ICR
- If a new ICR needs review and approval, include the ICR inquiry capture from FORUM

- NOTE: Use the Paste as plain text to paste the capture, then select the captured text and change the font to Courier.
- If a modification is needed to an existing ICR, include the mockup of the modification from a copy of the original ICR inquiry capture
  - Use a word document or mail message (that you won't send) to paste in the ICR inquiry capture from FORUM
  - Mockup the changes and highlight all the changes to create the to-be version of the ICR.
  - When ready to submit the ICR Request, copy the mockup from the word or mail message and use paste as plain text to add the modified ICR capture to the description. Then change the captured font to Courier and add back the highlighting that identifies what modifications are being requested. (This text manipulation is due to limitations in the fonts that are recognized by Sharepoint tools.)
- Separate captures for as-is and to-be can be added to the description, but the highlight of what needs to be modified must be included in the to-be capture.

**IOC DATE:** Enter the IOC (Initial Operating Capabilities) Date, if known. This will help the ICR Team identify the urgency, if there is an influx of ICRs that need to be prioritized.

**PATCH(ES):** Enter any PATCH(ES) associated with this ICR Request. (e.g., DG\*5.3\*1071)

**ICR NUMBER:** Enter the ICR Number (if existing).

**CUSTODIAL PACKAGE:** Enter the name and/or namespace for the Custodial Package.

**SUBSCRIBING PACKAGE:** Enter the name and/or namespace for the Subscribing Package.

**TYPE:** Select the Type of request from the pull-down options. Options include File, Remote Procedure Call, Routine, SQL Table, or Other.

**‘OTHER’ TYPE:** If Type from Step 13 is Other, provide a brief entry of what is being accessed.












**SUBMIT:** After completing the form, click Submit which will automatically send out an Email Message to the ICR Team, the requestor, and other recipients entered by the requestor. NOTE: Once the ICR Request is submitted, it cannot be edited from the form. If edits need to be made to the request, then explain changes to the request in the email message string created for this ICR Request. The message response could include a new ICR capture with altered modifications. The message string becomes the history of the discussion and evolution of the final ICR.

## 12.4. ICR Request Intake Form – Completed Example

An example of a completed ICR Request Intake Form is provided in Figure 2.

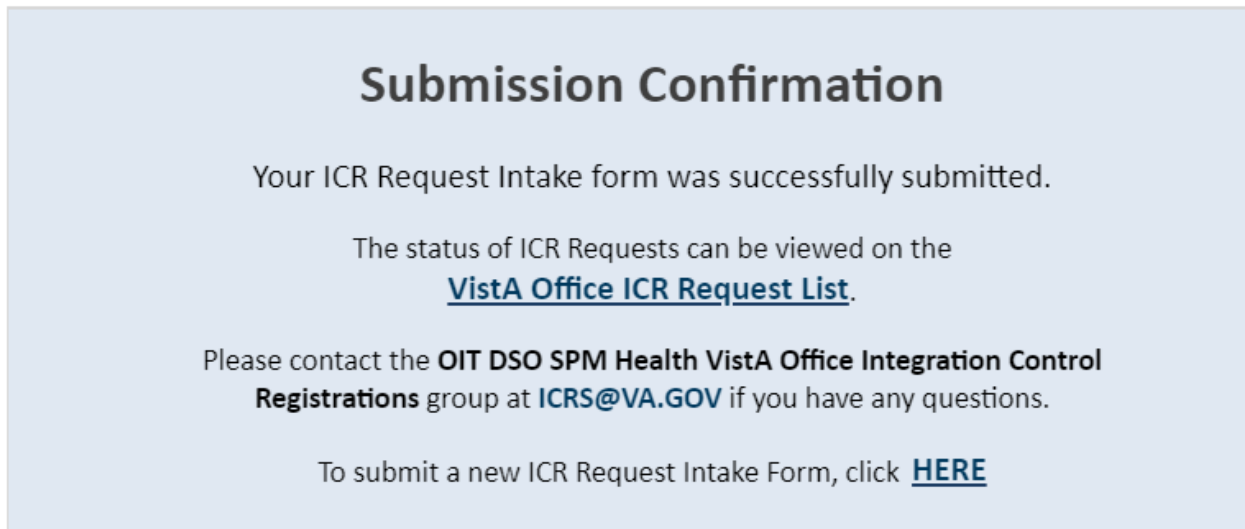


**Figure 2: ICR Request Intake Form - Completed Example**

Title of Request	VIA Request to Subscribe to ICR 7073 Mobile Scheduling Applications		
Date of Request	12/1/2021		
Requestor	Test, Developer	  	
Project Manager	One, ProjectManager	 	
Additional Recipients (GAL Entries)	Test, Developer2	 	
		 	
		 	
Additional Recipient Email(s)	ProjectManager2@example.com		
<b>Detailed Description of Request</b>			
MBAA is supporting SOMNOWARE sleep study, utilizing VIA services.			
Mobile Applications Scheduling Application Suite is using this RPC through the VistA Integration Adaptor's VIAB namespace), for a new Application under development (Somnoware), planned for VIAB*1.0*23. (VIA Java code released separate from VistA patch)			
IOC Date	3/15/2022		
Project			
Patch(es)	VIAB*1.0*23		
ICR Number	7073		
Custodial Package	MBAA		
Subscribing Package	VIA		
Software Class	Class 3		
Type	Remote Procedure Call		
'Other' Type			
<div>Submit</div>			

When the Submit button is clicked, a submission confirmation pop-up will appear, as shown in Figure 3.

**Figure 3 ICR Request Intake Form Submission Confirmation**



Additionally, when the Submit button is clicked, an Email message is autogenerated with the following information. This Email message will be the message string for further discussions related to this ICR Request. Additional recipients can be added as needed to the message string discussion by using a Reply to All action and adding the individuals in the TO: list.

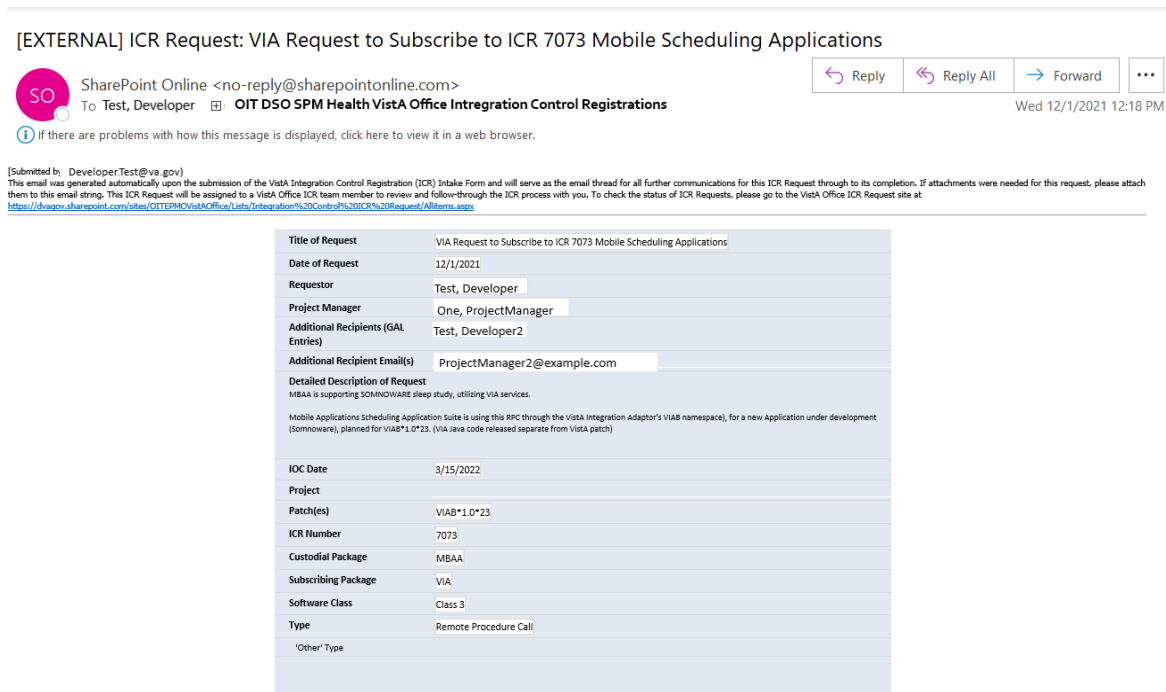
Subject: [EXTERNAL] ICR Request: “Title of Request”

From: Sharepoint Online <no-reply@sharepointonline.com>

TO: OIT DSO SPM Health VistA Office Integration Control Registrations Mailgroup [icrs@va.gov](mailto:icrs@va.gov) and Requestor. Additional recipients include Project Manager, Additional Recipients (GAL Entries), and Additional Recipient Email(s), if they were identified in the ICR request.

Figure 4 shows an example of the Email message generated.

**Figure 4: ICR Request Generated Email**



This email string will serve as the communication thread for all further communications for this ICR Request through to its completion. Upon receipt of the email, the ICR Request will be assigned to a VistA Office ICR team member to act upon the request.

## 13. ICR Request List

The VistA Office, Change Management pillar, ICR Team uses the ICR Request List to manage the ICR Requests submitted from the ICR Request Intake Form. The ICR Request List is available to any product teams who may want to look up activity related to an ICR.

### 13.1. How to Access the ICR Request List

The Edge or Chrome internet browser is recommended to access the ICR Request List. Internet Explorer will not work properly with Sharepoint tools.

The ICR Request List link can be accessed from the following Sharepoint pages:

- VistA Office Customer Portal Sharepoint Page [VistA Office Customer Portal \(sharepoint.com\)](#)
- ICR Process and Standards Sharepoint Page [ICR Process and Standards \(sharepoint.com\)](#)  
Note: The ICR Team recommends the user save this link to the user's Favorites folder.

The direct link to the ICR Request List is [VistA Office - ICR Request List - All Items \(sharepoint.com\)](#).

## 13.2. ICR Request List - Example

An example of the ICR Request List display is shown in Figure 5.

Figure 5: ICR Request List

Req ID	ICR #	Title	Requestor Name	Request Status	VO POC	VO
139	7073	VIA Request to Subscribe to ICR 7073 Mobile Sch...	TEST, DEVELOPER	Sent for Custodi...	ONE, VOSTAFF	
138	7107	Add COMPREHENSIVE CARE COORDINATI...	TEST, DEVELOPER2	Sent for Custodi...	ONE, VOSTAFF	
137	5491	Add COMPREHENSIVE CARE COORDINATI...	TEST, DEVELOPER	Sent for Custodi...	TWO, VOSTAFF	

The columns displayed in the list includes fields from the submitted ICR Request AND fields created for the VistA Office ICR Team to manage the ICR Request.

The sequence of the columns presented is from left to right, where the first 4 columns are the key fields that identify the ICR Request. After these identifying field columns, the ICR Team's key tracking columns are added based on fields the ICR Team uses to manage activity related to the ICR request.

The following summarizes the key columns to help identify the ICR Request and view the current activity related to the request:

Req ID	Unique number assigned to the ICR Request for tracking purposes
ICR #	ICR identified in the ICR Request
Title	Title of Request in the ICR request
Requestor	Requestor in the ICR Request
Request Status	ICR Request Status
VO POC	VO ICR Team Point of Contact assigned to the ICR Request
VO Comments	ICR Team comments to summarize activity

Followed by the remaining fields from the ICR Request which are viewable by scrolling to the right on the page.

The columns can be used to filter the ICR requests, as needed.

NOTE: Restrictions on what to **NOT** do from the opened ICR Request Status View:

- DO NOT use the NEW button on the ICR Request List to submit a new ICR Requests. Entering a new ICR should only be done by using the ICR Request Intake Form [Vista Office - Integration Control Registration \(ICR\) Request Intake Form \(sharepoint.com\)](#).

### 13.3. Open ICR Request to view ICR activity

In addition to the list view, the user can open a specific ICR Request to view the status and activity related to the ICR request. The user can find the ICR Request of interest in the list using column filters such as ICR #. Right click on the Title for the list entry and select Open.

This opens a view of the ICR Request which includes Status information. This is for View only purposes by individuals who are not members of the ICR Team.

Restrictions on what to **NOT** do from the opened ICR Request Status View:

- DO NOT use the Edit Item and Delete Item actions on the top menu of the page. These are for use by the ICR Team only.

If modifications are needed, please communicate the change in a Reply to All response to the email message string for the ICR Request. During the review process of the original ICR requests, it is common to have recommendations that are changes from the original request. The email responses are effective to track the evolution of changes. Edits to an ICR Request entry, after the initial ICR Request submission, should only be entered by the ICR Team.

The ICR Request Status View display is shown in Figure 6

**Figure 6: ICR Request Status View**

Title of Request	VIA Request to Subscribe to ICR 7073 for Mobile Scheduling Applications
Date of Request	12/01/2021
Requestor	TEST, DEVELOPER
Project Manager	ONE, PROJECTMANAGER
Additional Recipients (GAL entries)	TEST, DEVELOPER2
Additional Recipient Email(s)	PROJECTMANAGER2@EXAMPLE.COM
<b>Detailed Description of Request</b> NDAA is supporting SOMNOWARE sleep study, utilizing VIA services. Mobile Applications Scheduling Application Suite is using this RPC through the ViaA Integration Adaptor's VIA8 namespace, for a new Application under development (Somnoware), planned for VIA8*1.0*23. (VIA Java code released separate from ViaA patch)	
IOC Date	3/15/2022
Project	
Patch(es)	VIA8*1.0*23
ICR Number	7073
Custodial Package	SCHEDULING
Subscribing Package	VIA
Software Class	
Type	Remote Procedure Call
Other Type	
VO ICR STAFF ONLY	
Request ID	96
Request For	<input type="checkbox"/> Add Subscriber
What is being Accessed	RPC
Custodial Reviewer	ONE, CUSTODIALSME
Assigned To	ONE. VOSTAFF
VO Comments	
Priority	
Attachments	
VO Request Status:	Sent for Custodial Review
VO Received	12/1/2021
VO Assigned	12/1/2021
VO Withdrawn	
VO Msg Attached	
VO Completed	
Outlook Actions:	
Sent to Custodian	12/2/2021
Cust Approval	
Cust Deny/Alt Prop	
Sent VO Next Action	
Final Action Msg	
Msg String Captured	
FORUM Action Dates:	
Deactivated	
Activated	
Subscriber Added	
Withdrawn	
Retired/Decom	

## 14. References and Related Links

The following documents are available from links related to the VistA Reference Guide Sharepoint page [VistA Reference Guide \(sharepoint.com\)](#):

- VistA Reference Guide link  
[https://dvagov.sharepoint.com/sites/OITEPMOVistAOffice/VistA Reference Guide/Forms/AllItems.aspx?id=%2Fsites%2FOITEPMOVistAOffice%2FVistA Reference Guide%2FVistA Reference Guide Version 1%2E0%2Epdf&parent=%2Fsites%2FOITEPMOVistAOffice%2FVistA Reference Guide](https://dvagov.sharepoint.com/sites/OITEPMOVistAOffice/VistA%20Reference%20Guide/Forms/AllItems.aspx?id=%2Fsites%2FOITEPMOVistAOffice%2FVistA%20Reference%20Guide%2FVistA%20Reference%20Guide%20Version%201%2E0%2Epdf&parent=%2Fsites%2FOITEPMOVistAOffice%2FVistA%20Reference%20Guide%2FVistA%20Reference%20Guide%20Version%201%2E0%2Epdf)
- VistA Package/Namespaces Setup Guide is available at the following link:  
[https://dvagov.sharepoint.com/sites/OITEPMOVistAOffice/VistA Reference Guide/Forms/AllItems.aspx?id=%2Fsites%2FOITEPMOVistAOffice%2FVistA Reference Guide%2FVistA Package Namespaces Setup%2FVistA Package Namespaces Setup Guide Version 1%2E0%2Epdf&parent=%2Fsites%2FOITEPMOVistAOffice%2FVistA Reference Guide%2FVistA Package Namespaces Setup](https://dvagov.sharepoint.com/sites/OITEPMOVistAOffice/VistA%20Reference%20Guide/Forms/AllItems.aspx?id=%2Fsites%2FOITEPMOVistAOffice%2FVistA%20Reference%20Guide%2FVistA%20Package%20Namespaces%20Setup%20Version%201%2E0%2Epdf&parent=%2Fsites%2FOITEPMOVistAOffice%2FVistA%20Reference%20Guide%2FVistA%20Package%20Namespaces%20Setup%20Version%201%2E0%2Epdf)

The following are authoritative source links for items referenced throughout this document, including M programming standards, VistA document library for more technical documentation by Package, SQA Checklist, and other links related to VistA products.

- M Programming Standards and Conventions SAC  
[https://trm.oit.va.gov/RequestFiles/64102/M\\_Programming\\_SAC.docx](https://trm.oit.va.gov/RequestFiles/64102/M_Programming_SAC.docx)
- M Standards and Conventions Work Group SharePoint Site  
<https://dvagov.sharepoint.com/sites/OITEPMODEvelopment/sac/default.aspx>
- VA Software Document Library (VDL)  
<https://www.va.gov/vdl/>
- VistA SQA Checklist  
<https://dvagov.sharepoint.com/:x:/s/OITEPMOSoftwareTesting508/Ea95V9VHvNpIqXT1QMEemW0Bontu7quG0bpZEmNfBcVzCA?e=rf6idq&wdLOR=c929C135B-5433-49B2-BB7F-608FA3833BB9>
- VistA Primary Developer Review Checklist  
[https://dvagov.sharepoint.com/:w:/r/sites/OITProcessAssetLibrary/\\_layouts/15/Doc.aspx?sourcedoc=%7BF7BF7860-545B-431A-9C31-49294AA95E29%7D&file=vista\\_primary\\_developer\\_review\\_checklist.docx&wdLOR=c438F7544-44B1-480C-95A4-A7214EBD7B28&action=default&mobileredirect=true](https://dvagov.sharepoint.com/:w:/r/sites/OITProcessAssetLibrary/_layouts/15/Doc.aspx?sourcedoc=%7BF7BF7860-545B-431A-9C31-49294AA95E29%7D&file=vista_primary_developer_review_checklist.docx&wdLOR=c438F7544-44B1-480C-95A4-A7214EBD7B28&action=default&mobileredirect=true)
- VistA Secondary Developer Review Checklist  
[https://vaww.oed.wss.va.gov/process/Library/vista\\_secondary\\_developer\\_review\\_checklist.docx](https://vaww.oed.wss.va.gov/process/Library/vista_secondary_developer_review_checklist.docx)

- [VistA Verifier Checklist](https://dvagov.sharepoint.com/:w:/r/sites/OITProcessAssetLibrary/_layouts/15/Doc.aspx?sourcedoc=%7BA7D39720-42E3-4AC3-B2F6-DE2CD6BF6519%7D&file=vista_verifier_checklist.docx&wdLOR=c0C00AABD-F478-4477-A1C7-57F0E768D515&action=default&mobileredirect=true)  
[https://dvagov.sharepoint.com/:w:/r/sites/OITProcessAssetLibrary/\\_layouts/15/Doc.aspx?sourcedoc=%7BA7D39720-42E3-4AC3-B2F6-DE2CD6BF6519%7D&file=vista\\_verifier\\_checklist.docx&wdLOR=c0C00AABD-F478-4477-A1C7-57F0E768D515&action=default&mobileredirect=true](https://dvagov.sharepoint.com/:w:/r/sites/OITProcessAssetLibrary/_layouts/15/Doc.aspx?sourcedoc=%7BA7D39720-42E3-4AC3-B2F6-DE2CD6BF6519%7D&file=vista_verifier_checklist.docx&wdLOR=c0C00AABD-F478-4477-A1C7-57F0E768D515&action=default&mobileredirect=true)
- [VistA Monograph](https://dvagov.sharepoint.com/sites/OITEPMOVistAOffice/SitePages/VistA%20Monograph.aspx)  
<https://dvagov.sharepoint.com/sites/OITEPMOVistAOffice/SitePages/VistA%20Monograph.aspx>
- [VA System Inventory \(VASI\)](https://vac21appvem200.va.gov/VASI/) –  
<https://vac21appvem200.va.gov/VASI/> (The VEAR Systems Home site requires access.)
- [VA EA VistA Dashboard](https://app.powerbigov.us/groups/me/apps/5303d5ca-e063-4a4c-bc46-43392328111d/reports/adbbf65e-f668-440f-a627-b2081f985b19/ReportSection0fc99f2070328484b554?bookmarkGuid=Bookmark263faf9d51edce61945d) –  
<https://app.powerbigov.us/groups/me/apps/5303d5ca-e063-4a4c-bc46-43392328111d/reports/adbbf65e-f668-440f-a627-b2081f985b19/ReportSection0fc99f2070328484b554?bookmarkGuid=Bookmark263faf9d51edce61945d>

## 15. Contact

For more information on VistA ICR Guide, please contact the OIT DSO SPM Health VistA Office Integration Control Registrations at [icrs@va.gov](mailto:icrs@va.gov)