

# **Inspection Field Data Collection**



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# Chapter 1

## Overview

#### **Topics:**

- Overview of the Inspection Field Data Collection Module
- Access the Inspection Field Data Collection Overview Page
- Inspection Field Data Collection
   Workflow

## **Overview of the Inspection Field Data Collection Module**

The Inspection Field Data Collection functionality provides a targeted collection of data when the device you are using is in an offline, or disconnected, state. This allows those working in the field to use the GE Digital APM mobile application to complete downloaded Inspections without being connected to a wireless to network.

You can download an inspection report and any existing records with configured offline forms to your device's internal storage for later completion. You can also configure the layout and the fields available for any offline inspection forms. This allows you to have the most efficient Inspection Management interface for your data collection. Although offline Inspections do not provide a complete, end-to-end inspection workflow, they provide a basic data collection methodology and a simplistic interface that maintains the integrity of data collection.

While collecting inspection data offline, the information is stored in your device's internal storage. Then, when your device is connected to a network, you can synchronize the completed inspection information with the GE Digital APM database.

Offline forms are categorized into Full Inspections, General Inspections, Checklist Inspections, or Inspection Recommendations.

#### Important:

Be aware that data integrity issues may occur in the following scenarios:

- When synchronizing offline inspection data, if connectivity is lost, the state inspection will return to Pending Sync. The synchronization process will continue once connectivity is restored.
- When working offline, if an online inspection record is locked, synchronizing the offline inspection with the GE Digital APM database will result in an error indicating that the record cannot be changed.

## Access the Inspection Field Data Collection Overview Page

#### Procedure

In the module navigation menu, select **Integrity** > **Inspection Field Data Collection**. The **Inspection Field Data Collection Overview** page appears, displaying a list of inspections that you have downloaded.

#### Inspection Field Data Collection Overview

My Open Inspections	<b>3</b> Pr	ending	1 Ready To Sync
o Overdue			Remove from Device
INSP-691	Asset: RF097-014 ~ ~ QA RBI EVRGREEN EQUIP14 Functional location: MRD-ROA-REFN-RF097- EVRGREEN ~ RBI-EVERGREEN-	Inspection Document Type: API 510 External Checklist	Commencement Date: 4/24/2018
INSP-1034	Asset: ~ ~ EQU FOR CMBD CONF VAL Functional location: MRD-MI-TEST-RBI-EQUIPMENT ~ RBI Equipment	Inspection Document Type: Full Inspection	Commencement Date: 7/20/2018
INSP-1907	Functional location: AUTO FL FOR INSP TASKS ~	Inspection Document Type: Full Inspection	Commencement Date: 3/22/2019

The tabs at the top of the page summarize the inspections that have been downloaded for offline use. You can select a tab to view the following:

- Pending: Displays a list of downloaded inspections that can be accessed offline.
- **Ready to Sync** : Displays a list of downloaded inspections for which, field data has been collected. These inspections are ready to by synced with your GE Digital APM database.

The **Pending** section groups downloaded inspections into the following categories:

- **Overdue**: Displays a list of downloaded inspections that are past their due date.
- **Due in 7 Days**: Displays a list of downloaded inspections that need to be completed in the next seven days.
- **Due in More than 7 Days**: Displays a list of downloaded inspections with due dates are more than seven days in the future.

Both the **Pending** and the **Ready to Sync** sections display the following information about each inspection:

- Asset: The Equipment Record ID to which the downloaded inspection is linked.
- Functional Location: The ID of the Functional Location record linked to the downloaded Inspection record.
- Inspection Document Type: The type of inspection used in the downloaded Inspection record.
- Commencement Date: The day on which the downloaded inspection was created.

#### Results

- You can now evaluate inspection tasks which are coming due or are overdue.
- If needed, you can create inspection for identified inspection tasks.

## **Inspection Field Data Collection Workflow**

This workflow provides the basic, high-level steps for using this module. The steps and links in this workflow do not necessarily reference every possible procedure. For more procedures, see the links in the Related Information section.

- 1. Access Inspections that have been assigned to you.
- 2. Download the Inspections that you want to complete offline.
- 3. Complete offline field data collection.
- 4. Add Reference Document images.
- 5. Create offline Inspection Recommendations.
- 6. Sync completed offline Inspections to your GE Digital APM server.

# Chapter

# 2

## **About Inspection Field Data Collection**

#### **Topics:**

- About Full and General Inspection Offline Forms
- About Checklist Inspection
   Offline Forms
- About the Recommendation Offline Form
- About the Inspection History
   Report
- Access Inspections Assigned to You
- Download Offline Inspections
- Download a Single Inspection
- Download Bulk Inspections
- Enable Downloaded Inspections to be Downloaded by Another User
- Complete Inspection Field Data Collection
- Access Reference Document
   Images
- Access the Inspection History Report
- Add a Reference Document Image
- Remove Inspections from a
   Device
- Synchronize Offline Inspections

## **About Full and General Inspection Offline Forms**

You can download and complete both Full and General Inspections offline. The following subsections are available for Full and General Inspections:

- Full Inspections
  - General Finding
  - Bundle Sub Inspection
  - Pressure Test Sub Inspection
- General Inspections
  - General Finding
  - Pressure Test Sub Inspection

#### **Full Inspection Offline Forms**

This section displays information that is stored in the offline Full Inspection record. An example of the offline form is shown in the following image.

🗹 Create Recommendation 💿 Take Picture
Functional Location ID
016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
Commencement Date
7/18/2005 9:30 AM
Equipment Operating State
On-Line (ON-LINE)

#### **General Inspection Offline Form**

This section displays information that is stored in the offline General Inspection record. An example of the offline form is shown in the following image.

<	Inspection Details
	🗹 Create Recommendation 💿 Take Picture
sset ID	Functional Location ID
~ ~ QA IM Equipment Automation	MRD-MI-TEST-AUTOMATION ~ Automation Test Data
nspection Reference	Commencement Date
INSP-1963	3/25/2019 3:11 PM
rspection Headline	Equipment Operating State
General Inspection	On-Line (ON-LINE)
nspection Summary	

#### **General Finding Offline Form**

**Important:** Downloaded General Findings records will display both the Profile and the Method from the record, and these fields cannot be modified offline. If a user creates a new General Findings record offline, the Profile and Method fields cannot be edited until the record has been synced to your GE Digital APM server and accessed online. Therefore, Inspection Management Best Practices suggest creating General Findings records online prior to downloading them for offline completion.

This section displays information that is stored in the offline General Finding record. An example of the offline form is shown in the following image.

1	Gono	ral Finding		
>	Gene	arrinuing		
Add General Finding				
ALL Observation (OBSERVATION)		<b>≝ Create Recommendation</b>	e Record 💿 Take F	Picture
Headline		Туре		
Tube sheet - Visual Inspection		Observation (OBSERVATION)		$\sim$
Location Details				
Tube sheet				
Damage Mode		As Found Degradation Mechanism		
Fouling (FOULING)	$\sim$	Microbiological Attack (MICROBIOLOGI	CAL ATTACK)	$\sim$
Finding Summary				
Bundle was removed for inspection. Prior to clean	ing, heavy fouling was obs	rved on the portion of the tube sheet. No	significant changes	were
noted in the tube.				2
noted in the tube.				
noted in the tube.		Action Taken Description		
	~	This is a large text test for inspection rep		the reports
Action Taken Code	~		ion datasheets for	the reports

#### **Bundle Sub-Inspection Offline Form**

This section displays information that is stored in the offline Bundle Sub Inspection record. An example of the offline form is shown in the following image.

<	Bundle Sub-Inspection
Add Bundle Sub-Inspection	
NSP-2-BNDL	🖹 Delete Record 💿 Take Picture
Bundle Tag	Bundle Type
BundleTag-0001	U-Tube (U-TUBE)
Fotal Number Of Tubes In Bundle	Action This Inspection
150	Tubes Plugged (TUBES PLUGGED)
Tubes Plugged At Inspection Start	Tubes Plugged During This Inspection
12	2
Tubes (Plugged At Start) Replaced	Tubes (Not Previously Plugged) Replaced
0	0
Bundle Inspection Summary	
	for the reports and sub reports comes from the inspection datasheets for observations,

#### Pressure Test Sub-Inspection Offline Form

This section displays information that is stored in the offline Pressure Test Sub Inspection record. An example of the offline form is shown in the following image.

< Pressure	Test Sub-Inspection
Add Pressure Test Sub-Inspection	enden negetier - end Frederiken
INSP-2-PT	🖻 Delete Record 👘 Take Picture
Test Media (Shell)	Test Media (Tube)
Water (WATER)	Water (WATER)
Test Pressure (Shell)	Test Pressure (Tube)
75 (Pounds/Sq Inch Gage)	75 (Pounds/Sq Inch Gage)
Test Duration (Shell)	Test Duration (Tube)
30 (Minutes)	30 (Minutes)
Test Media Temperature (Shell)	Test Media Temperature (Tube)
75 (Degrees Fahrenheit)	75 (Degrees Fahrenheit)
No. of Gauges Used (Shell)	No. of Gauges Used (Tube)
2	2
SRV Set Pressure (Shell)	SRV Set Pressure (Tube)
120 (Pounds/Sq Inch Gage)	120 (Pounds/Sq Inch Gage)

## **About Checklist Inspection Offline Forms**

The following Checklist Inspections are available for completion offline:

- API 510 External Checklist
- API 510 Internal Checklist
- API 510 Internal Exchanger Checklist
- API 570 External Checklist
- API 653 External Checklist
- API 653 Internal Checklist
- External PRD Checklist
- PRD Pop Test Checklist

#### **API 510 External Checklist Offline Form**

This section displays information that is stored in the offline API 510 External Checklist record. An example of the offline form is shown in the following image.

RF097-016 ~ ~ QA RBI EVRGREEN EQUIP16		·
<	Inspection Details	>
	🗹 Create Recommend	lation 🖾 Take Picture
Asset ID	Functional Location ID	
RF097-016 ~ ~ QA RBI EVRGREEN EQUIP16	MRD-ROA-REFN-RF097-EVRGREEN ~ RBI-EVERG	REEN-UNIT1
nspection Reference	Commencement Date	
INSP-1011	1/2/1999 4:39 AM	<b></b>

The following sections are available for data collection in the API 510 External Checklist Inspection offline form:

- General
- Connections
- Supports
- Relief Devices

#### **API 510 Internal Checklist Offline Form**

This section displays information that is stored in the offline API 510 Internal Checklist record. An example of the offline form is shown in the following image.

~ ~ QA EQU FOR 510 INT CHECKLIST INSP	
< 11	spection Details
	Z Create Recommendation Take Picture
Asset ID	Functional Location ID
~ ~ QA EQU FOR 510 INT CHECKLIST INSP	510 INT CHECKLIST INSP $\sim$ FL $\sim$
nspection Reference	Commencement Date
INSP-2129	5/8/2019 11:48 AM
nspection Summary Text area	

The following sections are available for data collection in the API 510 Internal Checklist Inspection offline form:

- Shell
- Head
- Nozzles
- Internals

• Linings

#### **API 510 Internal Exchanger Checklist Offline Form**

This section displays information that is stored in the offline API 510 Internal Exchanger Checklist record. An example of the offline form is shown in the following image.

(	Inspection Details
	∠ Create Recommendation
sset ID	Functional Location ID
RF002-037 ~ ~ QA RBI EVRGREEN EQUIP37	MRD-ROA-REFN-RF002-EVRGREEN ~ RBI-EVERGREEN-UNIT2
spection Reference	Commencement Date
INSP-746	4/26/2018 2:07 AM

The following sections are available for data collection in the API 510 Internal Exchanger Checklist Inspection offline form:

- Shell
- Head
- Nozzles
- Internals
- Linings
- Channel/Bundle

#### **API 570 External Checklist Offline Form**

This section displays information that is stored in the offline API 570 External Checklist record. An example of the offline form is shown in the following image.

<	Inspection Details
	🗹 Create Recommendation 💿 Take Picture
sset ID	Functional Location ID
~ ~ QA AUTO EQUIP INSP TASK1	AUTO FL FOR INSP TASKS ~
ispection Reference	Commencement Date
INSP-1927	3/22/2019 3:28 PM

The following sections are available for data collection in the API 570 External Checklist offline form:

- General
- Connections
- Supports
- Insulation

#### **API 653 External Checklist Offline Form**

This section displays information that is stored in the offline API 570 External Checklist record. An example of the offline form is shown in the following image.

Inspection History R	eady for Check-In
pection Details	>
🗹 Create Recommendation	🗇 Take Picture
Functional Location ID	
MRD-MI-TEST-RBI-EQUIPMENT ~ RBI Equipment	
Commencement Date	
7/31/2018 8:51 PM	
	Functional Location ID MRD-MI-TEST-RBI-EQUIPMENT ~ RBI Equipment Commencement Date

The following sections are available for data collection in the API 653 External Checklist Inspection offline form:

- General
- Connections
- Supports

#### **API 653 Internal Checklist Offline Form**

This section displays information that is stored in the offline API 653 Internal Checklist record. An example of the offline form is shown in the following image.

<	Inspection Details	
	∠ Create Recon	mmendation
Asset ID	Functional Location ID	
~ ~ QA EQUP INSP W MULT DM	MRD-MI-TEST-RBI-EQUIPMENT ~ RBI Equip	ment
nspection Reference	Commencement Date	
INSP-274	1/17/2017 8:41 PM	

The following sections are available for data collection in the API 653 Internal Checklist Inspection offline form:

- Shell
- Roof
- Nozzles
- Internals
- Linings
- Bottom

#### **External PRD Checklist Offline Form**

This section displays information that is stored in the offline External PRD Checklist record. An example of the offline form is shown in the following image.

EQTN-QA-EQ-INSP001 ~ ~ QA EQUP FOR VIEW INSP	
<	Inspection Details
	Z Create Recommendation
isset ID	Functional Location ID
EQTN-QA-EQ-INSP001 ~ ~ QA EQUP FOR VIEW INSP	QA FL FOR VIEW INSP ~ QA TEST FL DESC
nspection Reference	Commencement Date
INSP-1973	3/26/2019 5:16 AM

The following sections are available for data collection in the External PRD Pop Test Checklist Inspection offline form:

- General
- Connections

#### **PRD Pop Test Checklist Offline Form**

This section displays information that is stored in the offline PRD Pop Test Checklist record. An example of the offline form is shown in the following image.

INSP-1842 (PRD Pop Test Checklist) ~~ EQU1 FOR BULK REPORT		Inspection History	Ready for Check-In
<	Inspection Details		>
		🗹 Create Recommen	dation 💿 Take Picture 🔊
Asset ID	Functional Location II	þ	
~ ~ EQU1 FOR BULK REPORT	FL FOR BULK INS	SPECTION REPORTS ~	
Inspection Reference	Commencement Date		
INSP-1842	9/28/2018 3:10	РМ	
Leak Test Results	Leak Category		
	~		
Design Set Pressure	Over Pressure Test Re	sults	
Numeric input			$\sim$
As Found Pop Pressure	As Left Pop Pressure		
Numeric input	Numeric input		
Inspection Summary			
Text area			

The following sections are available for data collection in the PRD Pop Test Checklist Inspection offline form:

- As Found
- Valve Rework
- Corrosion

## **About the Recommendation Offline Form**

You can download and complete inspections containing Inspection Recommendations for use offline when the **Enable Inspection Recommendations for Inspection Field Data Collection** preference is marked as true.

This section displays information contained in the Inspection Recommendations datasheet.

0	Existing 510 Internal Checklis	t Inspection Recomm	ien 💠
nspect	Take Picture		
	Recommendation ID		
	REC-10063		
	Asset ID	Functional Location ID	
	Text input	510 INT CHECKLIST INSP	°∼ FL
	Recommendation Headline	Recommendation Basis	
	Existing 510 Internal Checklist Inspection F	Internal Inspection	
	Inspection Profile Item	Target Completion Date	
	FL	5/24/2019 10:50 PM	
	Recommendation Description		
	510 Internal Checklist FL		শ
		Cancel	Save

## **About the Inspection History Report**

The Inspection Field Data Collection Inspection History Report displays the two most recent Inspections that are in the Approved state for that asset or Functional Location. You can view the Inspection History report from its parent Offline Inspection Form.

## **Inspection History Report**

Asset Details			
unctional Location ID		-TEST-RBI-DLOAD-EQUIP ~ RBI Dataloa	der Equipment
sset ID	~ ~ RE	3I DL EQU10	
Inspection History			
nspection Reference	INSP-6	11	
Completion Date	4/30/203	17	
nspection Summary			
General Findings			
Inspection Profile Item		Inspection Method Item	Туре
ANNULAR PLATE		Acoustic Emission (AE)	Observation (OBSERVATION)
Damage Mode		As Found Degradation Mechanism	Action Taken Code
Corrosion - General (CORROSION -		General Corrosion (GENERAL	None (NONE)
GENERAL)		CORROSION)	
Finding Summary		Test Finding Summary	
Inspection Profile Item		Inspection Method Item	Туре
BEARINGS		Penetrant Testing - Visible (PTV)	Observation (OBSERVATION)
Damage Mode		As Found Degradation Mechanism	Action Taken Code
No Data Available		No Data Available	None (NONE)
Finding Summary		No Data Available	
Inspection Profile Item		Inspection Method Item	Туре
No Data Available		No Data Available	Observation (OBSERVATION)
Damage Mode		As Found Degradation Mechanism	Action Taken Code
Blistering (BLISTERING)		General Corrosion (GENERAL	None (NONE)
		CORROSION)	
Finding Summary		Test123	

The Inspection History report includes the following sections:

- Asset Details: Displays details about the asset or Functional Location for the selected inspection.
- **Inspection History**: Displays the following information about the last two inspections for the asset or Functional Location that are in the Approved state:
  - If the selected Inspection is for an asset, then the last two Inspections created for that asset appear.
  - If the selected Inspection is for a Functional Location but not for an asset of that Functional Location, the last two Inspections created for the Functional Location appear.

**Note:** The Inspections on the Inspection History Report appear in descending order based on the value in the Completion Date field of the Inspection record.

- **Inspection Confidence Evaluation**: Displays the RBI Degradation Mechanisms for which the Inspection has been performed.
- General Findings: Displays the General Findings results for the Inspection.
- **Inspection Recommendation History**: Displays the last three Inspection Recommendations that have been generated for the asset or Functional Location. The Inspection Recommendations are listed in descending order based on the value in the Creation Date field. The Inspection Recommendations in the following states appear:
  - Implemented
  - Approved
  - In Progress
- Corrosion Analysis Summary: Displays content from the active TM Asset Corrosion Analysis.

## **Access Inspections Assigned to You**

#### **About This Task**

To access a list of your inspections on the **My Open Inspections** page, you must be the report owner on each inspection in the list.

#### Procedure

#### 1. Access the Inspection Management Overview.

2. Select the **Underlying Inspections** tab. The **Underlying Inspections** section appears.

	spection Manaş set: Home	gement Overview			÷ 1
137	<b>7</b> on Assets	391 Underlying Open Inspect	90 Underlying Inspection Ta	119 Underlying Recommend	6 Work Packs
Underly	ing Open Inspection	ns My Open Inspections A	Il Inspections for this Location		
66 	INSPECTION ID	INSPECTION FAMILY	ASSET ID	FUNCTION	IAL LOCATION ID
	INSP-220	Full Inspection	~ ~ QA TEST FL-A EQUP-I	QA TEST	INSP- FL-A ~ QA TEST INSP
	INSP-216	General Inspection	~ ~ QA TEST FL-A EQUP-I	QA TEST	INSP- FL-A ~ QA TEST INSP
	INSP-189	Bundle Inspection	~ ~ QA EQUP FOR VIEW II	NSP QA FL FC	OR VIEW INSP ~ TEST FL DE
_	INSP-188	Full Inspection	~ ~ QA EQUP FOR VIEW II	NSP QA FL FC	OR VIEW INSP ~ TEST FL DE
	INSP-191	Pressure Test Inspection	~ ~ QA EQUP FOR VIEW II	NSP QA FL FC	OR VIEW INSP ~ TEST FL DE
		API 570 External Checklist	EQTN-QA-EQ-INSP001 ~	~ QA EQUP FO QA FL FC	OR VIEW INSP ~ QA TEST FL
	INSP-1975	full of o Encernar one encourse			
	INSP-1975 INSP-1974	API 653 Internal Checklist	EQTN-QA-EQ-INSP001 ~	~ QA EQUP FO QA FL FC	OR VIEW INSP ~ QA TEST FL

 In the heading of the Underlying Inspections section, select My Open Inspections. The My Open Inspections section appears, displaying a list of inspections that have been assigned to you.

128	3 on Assets	106 My Open Inspect		85 Jnderlying Inspection Ta	sks Underlying Recomm	endations	6 Work Packs	4.1
Underlyir 88	ng Open Inspections	My Open Inspections A	II Inspections for this Locatio	n				
	INSPECTION ID	INSPECTION FAMILY	ASSET ID	FUNCTIONAL LOC	CATION ID	COMMENCE	MENT DATE	COMPLETION DATE
	INSP-2237	Pressure Test Inspection		AUTO FL FOR I	INSP TASKS ~	10/21/20	19 2:21:46 AM	10/21/2019 2:21:46 A
	INSP-2067	API 510 Internal Checkl		MRD-MI-TEST-	IM-OVERVIEW - IM OVERVIEW TES	T 4/1/2019	5:40:29 AM	4/1/2019 5:40:29 AM
	INSP-2066	Full Inspection		MRD-MI-TEST-	IM-OVERVIEW ~ IM OVERVIEW TES	T 4/1/2019	5:39:23 AM	4/1/2019 5:39:23 AM
	INSP-1972	ILI Checklist	EQTN-QA-EQ-INSP00	~ QA FL FOR VIE	W INSP ~ QA TEST FL DESC	3/26/201	9 5:12:00 AM	3/26/2019 5:12:00 AM
	INSP-1971	Third Party Damage Ch	EQTN-QA-EQ-INSP00:	~ QA FL FOR VIE	W INSP ~ QA TEST FL DESC	3/26/201	9 5:08:15 AM	3/26/2019 5:08:15 AM
	INSP-1927	API 570 External Check	~ ~ QA AUTO EQUIP IN	SP AUTO FL FOR I	INSP TASKS ~	3/22/2019	9 5:58:06 AM	3/22/2019 5:58:06 AM
	INSP-1905	Full Inspection		MRD-MI-TEST-	AUTOMATION ~ Automation Test D	ata 3/22/201	9 5:42:53 AM	3/22/2019 5:42:53 AM
	INSP-1682	Full Inspection	~~ QA EQUP FOR INSI	RE MRD-MI-TEST-	IM ~ Inspection Test Data	8/24/201	8 5:06:08 PM	8/24/2018 5:06:08 PM
	INSP-1681	Full Inspection	QA EQUP FOR INSI	RE MRD-MI-TEST-	IM – Inspection Test Data	8/24/201	8 3:38:33 PM	8/24/2018 3:38:33 PM
	INSP-1680	Full Inspection	~~ QA EQUP FOR STA	TE MRD-MI-TEST-	IM ~ Inspection Test Data	8/23/201	8 5:51:16 PM	8/23/2018 5:51:16 PM
-	INCD 1667	Constal Inspection			IM Inconcetion Test Data	0/27/2010	D C.73.13 DM	0/37/3010 E.73.13 DM

#### **Next Steps**

Download offline inspections

## **Download Offline Inspections**

#### **Before You Begin**

- You must be a member of the MI Inspection Security Group to download offline inspections.
- For an inspection to be downloaded, an offline form must be configured for the families it contains. The following Inspection Families have baseline configurations:
  - Inspections:
    - Full Inspection
    - General Inspection
  - Sub-Inspections:
    - Bundle Sub-Inspection
    - Pressure Test Sub-Inspection
  - Checklist Inspections:
    - API 510 External Checklist
    - API 510 Internal Checklist
    - API 510 Internal Exchanger Checklist
    - API 570 External Checklist
    - API 653 External Checklist
    - API 653 Internal Checklist
    - External PRD Checklist
    - PRD Pop Test Checklist

- Findings:
  - Checklist Finding
  - General Finding
- Any existing Inspection Recommendations for the Inspection are also downloaded when the Enable Inspection Recommendations for Inspection Field Data Collection preference is set to true.

#### Procedure

Do one of the following:

- Download a single inspection.
- Download bulk inspections.

## **Download a Single Inspection**

#### Procedure

- 1. Access the Inspection Management Overview page.
- 2. Select the **Inspection Assets** tab, and then select the Asset ID for the asset containing the inspections that you want to download.

The **Inspection Management Overview** page appears, displaying the inspections for the selected asset.

	🔅 Inspectverview	× 🎊 Asset:ML Plot	×		Eļ.	Q	?	錢
-							+	:
tions	2	rtion Tasks	0 Recommendations	6 Work Packs				
	on Manag ~ AQA Test TI	on Management Overview ~ AQA Test TML Plot	on Management Overview - AQA Test TML Plot	on Management Overview - AQA Test TML Plot	on Management Overview - AQA Test TML Plot 2 0 6	on Management Overview - AQA Test TML Plot 2 0 6	on Management Overview - AQA Test TML Plot 2 0 6	an Management Overview - AQA Test TML Plot 2 0 6

3. Select the **Inspections** tab.

A list of inspections contained in the asset appears.

√ Inspection Management Overview

Asset: Home

140	397	90	123	6		
Inspection Assets	Underlying Open Inspect	Underlying Inspection Ta	Underlying Recommend	Work Packs		
68						
EQUIPMENT TECHNICAL NUMBER	ASSET ID					
ZL0032-097	ZL0032-097 ~ LC	ZL0032-097 ~ LOOP SYSTEMS ~ 0000000001058807				
ZL0003-097	ZL0003-097 ~ LC	ZL0003-097 ~ LOOP SYSTEMS ~ 0000000001058787				
TECH-001	TECH-001 ~ ~ EQ	TECH-001 ~ ~ EQU UPDT INSP W CMMS TECHNUM				
RF097-018	RF097-018 ~ ~ Q	RF097-018 ~ ~ QA RBI EVRGREEN EQUIP18				
RF097-017	RF097-017 ~ ~ Q	RF097-017 ~ ~ QA RBI EVRGREEN EQUIP17				
RF097-016	RF097-016 ~ ~ Q	RF097-016 ~ ~ QA RBI EVRGREEN EQUIP16				
RF097-015	RF097-015 ~ ~ Q	RF097-015 ~ ~ QA RBI EVRGREEN EQUIP15				
RF097-014	RF097-014 ~ ~ Q	A RBI EVRGREEN EQUIP14				
Rows per page 50 100	200 500		1 - 100 of 140	Results ← 1 2		

 Select the Inspection ID of the inspection that you want to download. The Inspection Overview workspace for the selected Inspection appears, displaying the Inspection Data section.

Inspection Overview Full Inspection: INSP-210	Full Inspection: INSP-210     Asset ID: ~ ~ AQA Test TML Plot		₪ ⊻ 🗐
< + <i>P</i> I	Inspection Data	Inspection Confidence Evaluation	Team Members
Asset Corrosion Analysis (0)	Inspection Details		Save
Bundle Sub-Inspection (0)	Datasheet ID: Full Visual Inspection		site: Roanoke, VA
General Finding (2)	Visual Inspection Details		
Pressure Test Sub-Inspection (0)	Details		
Inspection Task (1)	Value(s) Inspection Reference		
	INSP-210		
	Asset ID		
	~ ~ AQA Test TML Plot		
	Asset ID Link		
	Open Asset Datasheet.		
	Equipment Technical Number		
	Text input		
	Functional Location ID		
	AQA Test TML Plot ~ MRD-MI-TEST-TM	1-EQ001	

5. In the upper-right corner of the **Inspection Overview** workspace, select 🔽.

+ 1

**Important:** The <sup>1</sup> button is disabled if the inspection is locked, currently downloaded to a device, or there are no offline forms configured for that event.

The **Download Inspection History Report** window appears.

6. If you want to download both the Inspection and the Inspection History Report, select **Yes**. The **Inspection Details** section appears, and the **Inspection History** button is enabled.

	Inspection Details
	🗹 Create Recommendation 💿 Take Picture
sset ID	Functional Location ID
HE-1608 CRUDE-HVY. ATMOS. GAS OIL	016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
rspection Reference	Commencement Date
INSP-2	7/18/2005 9:30 AM
spection Headline	Equipment Operating State
Full Inspection HE1608	On-Line (ON-LINE)
ispection Summary	
Equipment good working order, some Recommendations were	e required. See report

-or-

If you want to download only the Inspection, select No.

The Inspection Details section appears, and the Inspection History button is disabled.

INSP-2 (Full Inspection) HE-1608 CRUDE-HVY. ATMOS. GAS OIL	Inspection History Ready for Check-In
<	Inspection Details
	🗹 Create Recommendation 💿 Take Picture 📐
Asset ID	Functional Location ID
HE-1608 CRUDE-HVY. ATMOS. GAS OIL	016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
nspection Reference	Commencement Date
INSP-2	7/18/2005 9:30 AM
nspection Headline	Equipment Operating State
Full Inspection HE1608	Off-Line (OFF-LINE)
nspection Summary	
Equipment good working order, some Recommendations were	required. See report
	×.

**Note:** When an inspection is downloaded, the Downloaded, Last Downloaded By, and Last Downloaded Date fields are systematically set on the inspection record.

You can now access downloaded inspections on the Inspection Field Data Collection page.

#### Results

Downloaded inspections will appear on the Inspection Field Data Collection page.

#### **Next Steps**

Complete Offline Inspections.

## **Download Bulk Inspections**

#### Procedure

- 1. Access the Inspection Management Overview page
- Select the Underlying Inspections tab. The Underlying Inspections section appears.

	spection Manag set: Home	gement Overview			+ 1
137 Inspectio		391 Underlying Open Inspect	90 Underlying Inspection Ta	119 Underlying Recommend	6 Work Packs
Underlyi	ing Open Inspection	ns My Open Inspections Al	II Inspections for this Location		
<del>6</del> 8					
	INSPECTION ID	INSPECTION FAMILY	ASSET ID	FUNCTIO	DNAL LOCATION ID
	INSPECTION ID	INSPECTION FAMILY	ASSET ID	1000-00-00	DNAL LOCATION ID ↓
	25.000 (100 (100 (100 (100 (100 (100 (100			QA TES	
	INSP-220	Full Inspection	~ ~ QA TEST FL-A EQUP-I	QA TES QA TES	T INSP- FL-A ~ QA TEST INS
	INSP-220 INSP-216	Full Inspection General Inspection	~ ~ QA TEST FL-A EQUP-I ~ ~ QA TEST FL-A EQUP-I	QA TES QA TES NSP QA FL F	T INSP- FL-A ~ QA TEST INS T INSP- FL-A ~ QA TEST INS
	INSP-220 INSP-216 INSP-189	Full Inspection General Inspection Bundle Inspection	~ ~ QA TEST FL-A EQUP-I ~ ~ QA TEST FL-A EQUP-I ~ ~ QA EQUP FOR VIEW II	QA TES QA TES NSP QA FL F NSP QA FL F	T INSP- FL-A ~ QA TEST INS T INSP- FL-A ~ QA TEST INS FOR VIEW INSP ~ TEST FL DI
	INSP-220 INSP-216 INSP-189 INSP-188	Full Inspection General Inspection Bundle Inspection Full Inspection	~ ~ QA TEST FL-A EQUP-I ~ ~ QA TEST FL-A EQUP-I ~ ~ QA EQUP FOR VIEW II ~ ~ QA EQUP FOR VIEW II	QA TES QA TES NSP QA FL F NSP QA FL F NSP QA FL F	T INSP- FL-A ~ QA TEST INS T INSP- FL-A ~ QA TEST INS FOR VIEW INSP ~ TEST FL DI FOR VIEW INSP ~ TEST FL DI
	INSP-220 INSP-216 INSP-189 INSP-188 INSP-191	Full Inspection General Inspection Bundle Inspection Full Inspection Pressure Test Inspection	~ ~ QA TEST FL-A EQUP-I ~ ~ QA TEST FL-A EQUP-I ~ ~ QA EQUP FOR VIEW II ~ ~ QA EQUP FOR VIEW II ~ ~ QA EQUP FOR VIEW II	QA TES QA TES NSP QA FL F NSP QA FL F NSP QA FL F ~ QA EQUP FO QA FL F	T INSP- FL-A ~ QA TEST INS T INSP- FL-A ~ QA TEST INS FOR VIEW INSP ~ TEST FL DI FOR VIEW INSP ~ TEST FL DI

 In the heading of the Underlying Inspections section, select My Open Inspections. The My Open Inspections section appears, displaying a list of inspections that have been assigned to you.

#### ☑ Inspection Management Overview

Asset: Home

128	<b>}</b> n Assets	106 My Open Inspe		85 Underly	ing Inspection Tasks	123 Underlying Recommend	lations	6 Work Packs	
Underlyir	ng Open Inspections	My Open Inspections	All Inspections for this Locatio	on					
66				4					
	INSPECTION ID	INSPECTION FAMILY	ASSET ID		FUNCTIONAL LOCATION ID		COMMENCE	IENT DATE	COMPLETION DATE
	INSP-2237	Pressure Test Inspection	E.		AUTO FL FOR INSP TASKS	~	10/21/201	9 2:21:46 AM	10/21/2019 2:21:46
	INSP-2067	API 510 Internal Checkl.			MRD-MI-TEST-IM-OVERVI	EW IM OVERVIEW TEST	4/1/2019 5	:40:29 AM	4/1/2019 5:40:29 AM
	INSP-2066	Full Inspection			MRD-MI-TEST-IM-OVERVI	EW ~ IM OVERVIEW TEST	4/1/2019 5	:39:23 AM	4/1/2019 5:39:23 AM
	INSP-1972	ILI Checklist	EQTN-QA-EQ-INSP00	1 ~	QA FL FOR VIEW INSP ~ Q	A TEST FL DESC	3/26/2019	5:12:00 AM	3/26/2019 5:12:00 A
	INSP-1971	Third Party Damage Ch.	EQTN-QA-EQ-INSP00	1 ~	QA FL FOR VIEW INSP ~ Q	A TEST FL DESC	3/26/2019	5:08:15 AM	3/26/2019 5:08:15 A
	INSP-1927	API 570 External Check.	. ~ ~ QA AUTO EQUIP IN	NSP	AUTO FL FOR INSP TASKS	~	3/22/2019	5:58:06 AM	3/22/2019 5:58:06 A
	INSP-1905	Full Inspection			MRD-MI-TEST-AUTOMATI	ON ~ Automation Test Data	3/22/2019	5:42:53 AM	3/22/2019 5:42:53 AI
	INSP-1682	Full Inspection	~~ QA EQUP FOR INS	P RE	MRD-MI-TEST-IM ~ Inspec	tion Test Data	8/24/2018	5:06:08 PM	8/24/2018 5:06:08 PM
	INSP-1681	Full Inspection	QA EQUP FOR INS	P RE	MRD-MI-TEST-IM - Inspec	tion Test Data	8/24/2018	3:38:33 PM	8/24/2018 3:38:33 PM
	INSP-1680	Full Inspection	~ ~ QA EQUP FOR STA	TE	MRD-MI-TEST-IM ~ Inspec	tion Test Data	8/23/2018	5:51:16 PM	8/23/2018 5:51:16 Pf
-	INCD 1667	Constal Inspection		тс	MOD MI TECT IM Income	tion Toot Data	0/07/0010	C.73.13 DM	0/37/3010 5.73.13 0

**Note:** The **My Open Inspections** section is only available when the device is connected to the network.

4. Next to the Inspection ID of each Inspection that you want to download, select the check box, and then select 4.

**Important:** The <sup>1</sup> button is enabled for unlocked inspections that have offline forms configured and are not currently downloaded to another device.

The Confirm Bulk Download dialog box appears.

**Important:** Downloading or synchronizing a large number of records can degrade performance.

5. Select Yes.

The Download Inspection History Report window appears.

6. If you want to download both the Inspections and the Inspection History Reports, select **Yes**.

**Note:** If you select **Yes**, all Inspection History Reports for all selected inspections will be downloaded. You can download a maximum of twenty Inspection History Reports for use offline.

If you want to download only the inspections, select No.

The **Inspection Field Data Collection Overview** page appears, displaying a list of downloaded inspections.

**Note:** The related families configured in the Event Configuration are downloaded. Only the fields configured in offline forms are available for offline field data collection.

+ 1

Inspection Field Data Collection Overview

My Open Inspec	tions <b>3</b> P	ending	1 Ready To Sync
6 Overdue			Remove from Device
INSP-691	Asset: RF097-014 ~ ~ QA RBI EVRGREEN EQUIP14 Functional location: MRD-ROA-REFN-RF097- EVRGREEN ~ RBI-EVERGREEN-	Inspection Document Type: API 510 External Checklist	Commencement Date: 4/24/2018
INSP-1034	Asset: ~ ~ EQU FOR CMBD CONF VAL Functional location: MRD-MI-TEST-RBI-EQUIPMENT ~ RBI Equipment	Inspection Document Type: Full Inspection	Commencement Date: 7/20/2018
INSP-1907	Functional location: AUTO FL FOR INSP TASKS ~	Inspection Document Type: Full Inspection	Commencement Date: 3/22/2019

#### Results

• Downloaded inspections will appear under the Inspection Field Data Collection page.

#### **Next Steps**

Complete Offline Inspections.

# Enable Downloaded Inspections to be Downloaded by Another User

#### **About This Task**

Inspections that are downloaded for Inspection Field Data Collection by a user are locked in GE Digital APM and cannot be edited or downloaded by another user. If the user who downloaded the inspection(s) is not available to sync back the inspection to GE Digital APM or if the devices used during the download are no longer accessible, this option allows you to re-enable an inspection and allow the inspection to be downloaded by another user.

Important: Only Inspection Administrators can perform this action.

#### Procedure

- 1. Access the Inspection Field Data Collection page.
- Select the View Downloaded Inspections. The All Downloaded Inspections page appears, displaying a list of currently downloaded inspection.

	All Dov	vnloaded Inspec	ctions			
	ôô					
		INSPECTION ID	INSPECTION FAMILY	ASSET ID	DOWNLOADED BY	DOWNLOAD DATE
_		INSP-1976	Full Inspection		Super User, Baseline ~ bl	1/14/2020 1:51:38 AM
_						
_	1-1of:	1 Results				□ Page 1 of 1 □
					Close	Enable Inspection(s)

- 3. Select the check box for the inspection you want to re-enable, and then select **Enable Inspection(s)**. A confirmation message appears.
- 4. Select **Yes**.

Inspections are re-enabled in GE Digital APM, and are now available to be downloaded again.

#### Results

**Note:** After an inspection is re-enabled:

- All the fields in the Inspection record and its related records are enabled in GE Digital APM.
- Another user can now download the inspection.
- The Last Downloaded By user on the inspection can no longer sync back the inspection to GE Digital APM.

## **Complete Inspection Field Data Collection**

#### **Before You Begin**

Download the offline inspection.

#### Procedure

- 1. Access the Inspection Field Data Collection page.
- 2. On the **Inspection Field Data Collection** page, select the inspection that you want to complete. The corresponding offline inspection form appears, displaying the **Inspection Details** section.

<	Inspection Details
sset ID	Functional Location ID
HE-1608 CRUDE-HVY. ATMOS. GAS OIL	016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
rspection Reference	Commencement Date
INSP-2	7/18/2005 9:30 AM
nspection Headline	Equipment Operating State
Full Inspection HE1608	On-Line (ON-LINE)
ispection Summary	

- 3. Optionally, in the Inspection Details section, modify the available fields.
- In the upper-left corner of the section, select .
   A pane appears, displaying the available inspection or checklist types. Depending on the type of inspection and its offline event configuration, the left pane will display related sub-inspections, General Findings records for Full Inspections, and Checklist types of Checklist Inspections.

undle Sub-Inspection	Inspection Details
ressure Test Sub-Inspection	🖆 Create Recommendation 💿 Take Picture
eneral Finding	Functional Location ID
	016-E-E3104A CRUDE-HVY, ATMOS. GAS OIL
	Commencement Date
	7/18/2005 9:30 AM
	Equipment Operating State
	On-Line (ON-LINE)

5. Optionally, navigate through the available related sections or families, modifying any of the available fields.

**Tip:** If you want to create another inspection, checklist, bundle sub-inspection, general findings, or pressure test record on the same offline inspection form, you can select the **+** [Inspection or **Checklist**] **Type** link at the top of the section. A new record will appear before the existing record. You

can delete an inspection or checklist record by selecting **Delete Record**. Only records that were added while offline can be deleted; you cannot delete downloaded records.

INSP-2 (Full Inspection) HE-1608 CRUDE-HVY. ATMOS. GAS OIL			Inspection History	Ready for Check-In
<	Gen	eral Finding		
Add General Finding				
New General Finding		⊠ Create Recommendati	on 🗎 Delete Record 💿	Take Picture
Headline		Туре		
Text input		Observation (OBSERVATION)		$\sim$
ocation Details				
Text input				
amage Mode		As Found Degradation Mechanism		
	~			$\sim$
inding Summary				
Text area				
				الا
Action Taken Code		Action Taken Description		
None (NONE)	$\sim$	Text area		
				<u>الا</u>

6. After all desired field data has been collected on the offline form, select **Ready for Check-In**. The offline inspection form is completed and saved locally.

**Note:** After selecting **Ready for Check-In**, your data is automatically saved and is ready to be linked to your GE Digital APM database once a network connection is received.

#### **Next Steps**

Synchronize offline inspections

## **Access Reference Document Images**

#### **About This Task**

**Important:** To use the reference document image functionality, you must use the GE Digital APM mobile application. If you are using GE Digital APM in a web browser, you cannot access the camera on your device. Additionally, to add reference document images to an Offline Inspection family, the Has Reference Documents relationship must be defined for that family.

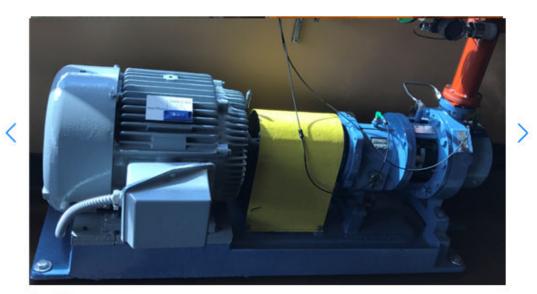
#### Procedure

- 1. Via the GE Digital APM mobile application, access the **Inspection Field Data Collection Overview** page.
- On the Inspection Field Data Collection Overview page, select the Inspection containing the reference document images that you want to access. The Inspection Details section for the selected Inspection appears.

<	Inspection Details
	Z Create Recommendation
Asset ID	Functional Location ID
HE-1608 CRUDE-HVY. ATMOS. GAS OIL	016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
Inspection Reference	Commencement Date
INSP-2	7/18/2005 9:30 AM
Inspection Headline	Equipment Operating State
Full Inspection HE1608	On-Line (ON-LINE)
Inspection Summary	
Equipment good working order, some Recommendations we	re required. See report

3. In the upper-right corner of the section, select . The **Images for <Inspection Name>** window appears, displaying the images saved to the Inspection.

### Images for INSP-210 (Full Inspection)



Description:





- 4. On the Images for <Inspection Name> window, you can:
  - Use the  $\leq$  and > buttons to toggle through images associated with the Inspection.
  - Enter text in the **Description** box for each image.
  - On the upper right corner of the image thumbnail, select imes , and then select **Yes** to delete the image.
- 5. Select Close.

The Inspection Details section for the selected Inspection appears.

🗹 Create Recommendation 💿 Take Picture
Functional Location ID
016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
Commencement Date
7/18/2005 9:30 AM
Equipment Operating State
On-Line (ON-LINE)

## **Access the Inspection History Report**

#### **Before You Begin**

• Download the offline inspection and the corresponding Inspection History Report.

#### Procedure

- 1. Access the Inspection Field Data Collection page
- 2. On the **Inspection Field Data Collection** page, select the inspection containing the Inspection History Report that you want to access.

The corresponding offline inspection form appears, displaying the **Inspection Details** section.

INSP-2 (Full Inspection) HE-1608 CRUDE-HVY. ATMOS. GAS OIL		Inspection History	Ready for Check-In	1
<	Inspection Details			>
		Z Create Recommen	dation 🗇 Take Picture	~
Asset ID	Functional Location ID			
HE-1608 CRUDE-HVY. ATMOS. GAS OIL	016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL			
nspection Reference	Commencement Date			
INSP-2	7/18/2005 9:30 AM		6	
nspection Headline	Equipment Operating Sta	te		
Full Inspection HE1608	On-Line (ON-LINE)			~
Inspection Summary				
Equipment good working order, some Recommendations were	required. See report			
				الا

3. In the upper-right corner of the section, select Inspection History.

The Inspection History report appears.

•					
Asset Details					
unctional Location ID	MRD-MI-	TEST-RBI-DLOAD-EQUIP ~ RBI Dataloa	der Equipment		
sset ID	~ ~ RB	I DL EQU10			
Inspection History					
nspection Reference	INSP-61	11			
Completion Date	4/30/201	4/30/2017			
nspection Summary					
General Findings					
Inspection Profile Item		Inspection Method Item	Туре		
ANNULAR PLATE		Acoustic Emission (AE)	Observation (OBSERVATION)		
Damage Mode		As Found Degradation Mechanism	Action Taken Code		
Corrosion - General (CORR	OSION -	General Corrosion (GENERAL	None (NONE)		
GENERAL)		CORROSION)			
Finding Summary		Test Finding Summary			
Inspection Profile Item	_	Inspection Method Item	Туре		
BEARINGS		Penetrant Testing - Visible (PTV)	Observation (OBSERVATION)		
Damage Mode		As Found Degradation Mechanism	Action Taken Code		
No Data Available		No Data Available	None (NONE)		
Finding Summary		No Data Available	·····/		
Inspection Profile Item		Inspection Method Item	Туре		
No Data Available		No Data Available	Observation (OBSERVATION)		
Damage Mode		As Found Degradation Mechanism	Action Taken Code		
Blistering (BLISTERING)		General Corrosion (GENERAL CORROSION)	None (NONE)		
Finding Summary		Test123			

## **Inspection History Report**

## Add a Reference Document Image

#### **Before You Begin**

• Access the **My Open Inspections** section to view Inspections that have been assigned to you, and then download one or more Inspections for which you want to add a Reference Document image.

#### Procedure

- 1. Via the GE Digital APM mobile application, access the **Inspection Field Data Collection Overview** page.
- 2. On the **Inspection Field Data Collection Overview** page, select the Inspection for which you want to add a reference document image.

The **Inspection Details** section for the selected Inspection appears.

🗹 Create Recommendation 💿 Take Picture
Functional Location ID
016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
Commencement Date
7/18/2005 9:30 AM
Equipment Operating State
On-Line (ON-LINE)

- 3. In the upper-right corner of the workspace, select **Take a Picture**. The native camera app for your device appears.
- 4. Using the camera on your mobile device, take a picture of the Inspection asset that you want to add as a reference document.

**Note:** After taking a picture that you want to keep, follow the prompts to save the image.

**Important:** You can include a maximum of 20 reference documents for each Inspection Report, which includes the Inspection Report's associated records.

The Inspection Details section appears.

<	Inspection Details
\	
	Z Create Recommendation
Asset ID	Functional Location ID
HE-1608 CRUDE-HVY. ATMOS. GAS OIL	016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
Inspection Reference	Commencement Date
INSP-2	7/18/2005 9:30 AM
Inspection Headline	Equipment Operating State
Full Inspection HE1608	On-Line (ON-LINE)
Inspection Summary	
Equipment good working order, some Recommendations we	re required. See report

#### Results

- In the upper-right corner of the workspace, the number next to the sicon increases for each picture that you save to the Inspection record.
- A default Reference Document ID is provided for each image.
- You can now sync the offline Inspection.
- Images are unique to each individual inspection record.

## **Remove Inspections from a Device**

#### **About This Task**

Note: You cannot remove inspections when you are disconnected from the network.

#### Procedure

1. Access the Inspection Field Data Collection Overview page.

Access a list of downloaded inspections by choosing any one of the following options:

• The **Inspection Field Data Collection Overview** page appears containing a list of downloaded inspections that can be accessed offline in the **Pending** section.

Inspection Field Data Collection Overview

<b>1</b> Pending		1 Ready To Sync	
1 Overdue		Remov	
INSP-2056	Asset: ~ ~ QA EQUP INSP RECOMM Functional location: FL FOR INSP RECOMM ~	Inspection Document Type: Full Inspection	
0 Due In 7 Days			
No inspections due in the next 7 days			
0 Due In More Than 7 Days			
No inspections due in more than 7 days			

 Select the **Ready To Sync** tab to access the list of downloaded inspections for which, field data has been collected and marked for Ready for Check-In.

The **Ready To Sync** section appears.

Inspection Field Data Collection Overview

	1 Pending		<b>1</b> Ready To Sync
		Remove fr	om Device Sync All Sync Selected
INSP-2055	Asset: ~ ~ QA EQUP INSP RECOMM Functional location: FL FOR INSP RECOMM ~	Inspection Document Type: Full Inspection	Commencement Date: 3/28/2019

2. Select the check box next to the inspection you want to remove, and then select **Remove from Device**.

The selected inspection is removed from the device.

#### Note:

- You can remove one inspection at a time.
- You can access and manage the inspection in Inspection Management after an inspection is removed from a device.
- All the fields in the Inspection record and its related records are enabled.
- The Downloaded field on the removed inspection is reset to false.

### Synchronize Offline Inspections

#### **Before You Begin**

• Complete Inspection Field Data Collection.

#### **About This Task**

**Note:** If you attempt to synchronize inspections when you are disconnected from a network, the synchronization process will not transfer information to the database. The offline functionality periodically checks for network connection, and once a connection is detected, the synchronization process resumes; however, it is recommended that you only synchronize inspections when connected to a network.

#### Procedure

- 1. Access the Inspection Field Data Collection page.
- 2. Select the Ready to Sync tab.

The **Ready to Sync** section appears, displaying a list of inspections that have been marked for **Ready** for **Check-In**.

2 Pending		2 Ready To Sync	
			Sync All Sync Selected
INSP-2	Asset: HE-1608 CRUDE-HVY. ATMOS. GAS OIL Functional location: 016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL	Inspection Document Type: Full Inspection	Commencement Date: 7/18/2005
INSP-1963	Asset: ~ ~ QA IM Equipment Automation Functional location: MRD-MI-TEST-AUTOMATION ~ Automation Test Data	Inspection Document Type: General Inspection	Commencement Date: 3/25/2019

Inspection Field Data Collection Overview

3. Next to each inspection that you want to synchronize with the GE Digital APM database, select the check box, and then select **Ready to Sync**.

-or-

Select Sync All to synchronize all inspections that are ready for check-in.

The selected offline inspections are synced with the GE Digital APM database and no longer appear on the section.

**Note:** If an administrator has unmarked an inspection as downloaded, the inspection cannot be synced back to GE Digital APM.

**Note:** If errors are present during the synchronization process, the status of the synchronization will change to Completed with Errors, and the selected inspections will remain in the **Ready to Sync** section. If errors are present, the synchronization will fail, and your database will not be updated with data collected while offline. You must resolve all errors and synchronize the offline inspections again before they will be added to the GE Digital APM database. If errors occur:

a. In the **Ready to Sync** section, select an inspection that did not sync because of errors. The offline form for the selected inspection appears.

INSP-30110 (Full Inspection) 000000000001057047	$\mathbb{A}$ 1 Page with Errors	Inspection History Ready for Check-In
	Inspection Details	>
		Z Create Recommendation
Asset ID	Functional Location ID	
0000000001057047	MRD-ROA-REFN-RF097-F0065-097	
Inspection Reference	Commencement Date	
INSP-30110	9/19/2016 12:00 AM	8
Inspection Headline	Equipment Operating State	
Text input		$\sim$
Inspection Summary		
Text area		
		الآ

#### -or-

For an error that occurred on a recommendation, open the **Recommendations** pane, and then select the Recommendation to view the errors.

0	1 Recommendations		4
spect	<b>REC 136543165</b> Visual Inspection 5/1/2017	▲	Not Synced

b. In the heading of the offline form, using either < or >, navigate to the offline form containing the error notification in the heading.

INSP-30110 (Full Inspection) 00000000001057047	$\mathbb{A}$ 1 Page with Errors	Inspection History	Ready for Check-In
<	Bundle Sub-Inspection $\triangle$		>
+ Add Bundle Sub-Inspection			
A 1 Error			
New Bundle Sub-Inspection		Delete Record	Take Picture
Bundle Tag	Bundle Type		
Text input			~
Total Number Of Tubes In Bundle	Action This Inspection		
20	No Action (NO ACTION)		~
Tubes Plugged At Inspection Start	Tubes Plugged During This Inspection		
50	Numeric input	N	
Tubes (Plugged At Start) Replaced	Tubes (Not Previously Plugged) Replaced	2	
Numeric input	Numeric input		
Bundle Inspection Summary			
Text area			
			Su .

c. Above the datasheet, on the left side of the form, select  $^{\triangle}$  <#> Errors.

The **Errors** window appears, displaying a list of errors that need to be corrected.

Errors	
Bundle Sub-Inspection	
	Close

- d. Address the errors listed on the Errors window, and then select Ready for Check-In.
- e. Repeat Steps 2 and 3 of the procedures in this topic.

#### Results

- The synchronized offline inspections can now be accessed and managed in Inspection Management. All the fields in the Inspection record and its related records will be enabled.
- The Last Synced Back By and Last Synced Date fields will be set systematically.
- If you have not entered a value in the Recommendation ID field, one will be generated for you.
- All Inspection Recommendations and Reference Document images are synchronized with the GE Digital APM database.
- If you synchronized a Reference Document image:
  - The text entered in the Description field of the **Images for <Inspection Name>** is synchronized with the GE Digital APM database.
  - Each image linked to a corresponding record is created as a Related Reference Document for that record. For example, images captured for a Full Inspection record will be stored as Related Reference Documents for that Full Inspection.
  - Reference Documents can be accessed from Inspection Management.

## Chapter

# 3

## About Inspection Field Data Collection Recommendations

**Topics:** 

- Access Offline Inspection Recommendations
- Create Offline Inspection Recommendations
- Modify Offline Inspection Recommendations
- Enable Inspection
   Recommendations for
   Inspection Field Data Collection
- Delete Offline Inspection
   Recommendations

## **Access Offline Inspection Recommendations**

#### **Before You Begin**

Access the **My Open Inspections** section to view Inspections that have been assigned to you, and then download one or more Inspections for which you want to access Inspection Recommendations.

**Note:** You can only view and modify offline inspection recommendations when the **Enable Inspection Recommendations for Inspection Field Data Collection** preference is set to true.

#### Procedure

- 1. Access the Inspection Field Data Collection page.
- Select the Inspection containing the recommendation you want to access. The corresponding offline Inspection form appears, displaying the Inspection Details section.

	Inspection Details
	🗹 Create Recommendation 💿 Take Picture 🛛 🙀
sset ID	Functional Location ID
HE-1608 CRUDE-HVY. ATMOS. GAS OIL	016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
spection Reference	Commencement Date
INSP-2	7/18/2005 9:30 AM
spection Headline	Equipment Operating State
Full Inspection HE1608	On-Line (ON-LINE)
spection Summary	

In the upper-right corner of the page, select 2.
 The Recommended Actions pane appears, displaying a list of recommendations for the selected Inspection.

0	3 Recommendations	4
ener	REC6908764 Visual Inspection	Not Synced
	7/18/2017	Not Synced
	REC6754908	
	Internal Inspection 11/24/2017	Not Synced
	REC54690	
	Visual Inspection 10/27/2017	Not Synced

In the **Recommended Actions** pane, note the following Recommendations fields that are displayed:

- a. The Recommendation ID, which identifies the recommendation record.
- b. The Status, which indicates the state of the Inspection Recommendation.

Note: The default state for newly added offline Inspection Recommendations is Not Synced.

- c. The Recommendation Headline, which provides a short description of the recommended action.
- d. The Target Completion Date, which is the date by which the recommended action should be completed.

### **Create Offline Inspection Recommendations**

#### **Before You Begin**

You can only view and modify offline inspection recommendations when the **Enable Inspection Recommendations for Inspection Field Data Collection** preference is set to true.

#### Procedure

- 1. Access the Inspection Field Data Collection page.
- Select the inspection for which you want to create a recommendation. The corresponding offline inspection form appears, displaying the **Inspection Details** section.

<	Inspection Details
	Z Create Recommendation 💿 Take Picture
Asset ID	Functional Location ID
HE-1608 CRUDE-HVY. ATMOS. GAS OIL	016-E-E3104A CRUDE-HVY. ATMOS. GAS OIL
nspection Reference	Commencement Date
INSP-2	7/18/2005 9:30 AM
nspection Headline	Equipment Operating State
Full Inspection HE1608	On-Line (ON-LINE)
nspection Summary	

3. Optionally, if you want to create a recommendation for either a General Finding or a Checklist Inspection record, select < or > to navigate to the appropriate section.

INSP-60 (API 653 Internal Checklist) ~ EQU W INSPS		Inspection History Ready for Check-In
<	Roof	>
Corrosion		i ⊂ Create Recommendation 💿 Take Picture 🦷
Value		
N/A		~
Finding Summary		
Text area		
		<u>الا</u>

4. In the upper-right corner of the page, select **Create Recommendation**. In the workspace, a new Inspection Recommendation offline form appears.

Ø	: Not Synced		*
ener	ⓒ Take Picture		Ē
	Recommendation ID		
	Text input		
	Asset ID	Functional Location ID	
	Text input	Text input	
	Recommendation Headline	Recommendation Basis	
	Text input	Text input	
	Inspection Profile Item	Target Completion Date	
	Text input		Ê
<u>`</u>	Recommendation Description		
	Text area		
			۲
		Cancel	Save

- 5. As needed, enter values in the available fields. Note that:
  - The Target Completion Date field is required.
  - You can enter a unique value in either the Recommendation ID or the Recommendation Headline field. If you do not enter a value in either of these fields, a value will be generated for the Recommendation ID field.

**Tip:** It is recommended that you enter a value in the Recommendation Headline field if you do not enter a value in the Recommendation ID field.

- You can select **Take Picture** to add a reference document images to the recommendation.
- You can select sto view existing reference document images.
- If you create a recommendation for a General Finding record, the Recommendation Headline field on the offline Inspection Record will be a concatenated value populated by the Inspection Profile and the Inspection Methods field of that General Findings record.
- 6. Select Save.

The **Recommended Actions** pane appears, displaying the newly added recommendation.

Note: The default status for newly added offline Inspection Recommendations is Not Synced.

0	3 Recommendations	-t-
ener	<b>REC6908764</b> Visual Inspection 7/18/2017	Not Synced
	REC6754908 Internal Inspection 11/24/2017	Not Synced
	REC54690 Visual Inspection 10/27/2017	Not Synced

7. Select <sup>(2)</sup> to close the **Recommended Actions** pane.

## **Modify Offline Inspection Recommendations**

#### **Before You Begin**

You can only view and modify offline inspection recommendations only when the **Enable Inspection Recommendations for Inspection Field Data Collection** preference is set to true.

#### Procedure

- 1. Access Inspection Recommendations.
- 2. In the **Recommendations** pane, select the recommendation that you want to modify. In the workspace, the Inspection Recommendation offline form appears.

💿 Take Picture		
L		
Recommendation ID		
REC-10063		
Asset ID	Functional Location ID	
Text input	510 INT CHECKLIST INSP ~ FL	
Recommendation Headline	Recommendation Basis	
Existing 510 Internal Checklist Inspection F	Internal Inspection	
Inspection Profile Item	Target Completion Date	
FL 5/24/2019 10:50 PM		
Recommendation Description		
510 Internal Checklist FL		s
		Save
	Asset ID Text input Recommendation Headline Existing 510 Internal Checklist Inspection F Inspection Profile Item FL Recommendation Description	Asset ID Functional Location ID Text input 510 INT CHECKLIST INSP ~ FL Recommendation Headline Recommendation Basis Existing 510 Internal Checklist Inspection F Internal Inspection Inspection Profile Item Target Completion Date FL 5/24/2019 10:50 PM Recommendation Description

- 3. As needed, modify values in the available fields. Note that:
  - The Target Completion Date field is required.

**Tip:** It is recommended that you complete either the Recommendation Headline or the Recommendation ID field to identify Inspection Recommendations.

- You can select **Take Picture** to Add a Reference Document Image on page 32 to the recommendation.
- You can select 🖾 to view existing reference document images.

**Note:** Selecting **Cancel** will discard only the changes made to the datasheet. Images taken while on the datasheet will not be deleted. To delete images, you must delete them on the Images for <Inspection Name> window for the corresponding Inspection record.

4. Select Save.

Changes to the Inspection Recommendation offline form are saved.

5. Select Recommendations

## Enable Inspection Recommendations for Inspection Field Data Collection

#### Procedure

- 1. Access the Inspection Configuration workspace.
- 2. Select 🖉 to modify the **Application Configurations** page.
- 3. Select the Enable Inspection Recommendations for Inspection Field Data Collection check box.
- 4. Select 💾

**Note:** When the **Enable Inspection Recommendations for Inspection Field Data Collection** is set to false, recommendations cannot be viewed, created, or modified on newly downloaded inspections from Inspection Field Data Collection.

The default value for **Enable Inspection Recommendations for Inspection Field Data Collection** is true.

## **Delete Offline Inspection Recommendations**

#### **About This Task**

#### Important:

- You can only delete newly created offline Inspection Recommendations that have not yet been synced toGE Digital APM.
- You can only view and modify offline inspection recommendations when the **Enable Inspection Recommendations for Inspection Field Data Collection** preference is set to true.

#### Procedure

- 1. Access Inspection Recommendations.
- 2. In the **Recommendations** pane, select the recommendation that you want to delete. In the workspace, the Inspection Recommendation offline form appears.

t 💿 Take Picture		Ū
Recommendation ID		
REC-10063		
Asset ID	Functional Location ID	
Text input	510 INT CHECKLIST INSP ~ FL	
Recommendation Headline	Recommendation Basis	
Existing 510 Internal Checklist Inspection F	Internal Inspection	
Inspection Profile Item	Target Completion Date	
FL	5/24/2019 10:50 PM	Ē
Recommendation Description		
510 Internal Checklist FL		
<u></u>		
	Cancel	Save

- In the upper-right corner of the Inspection Recommendation offline form, select ull.
   A message appears, asking you to confirm that you want to delete the selected Inspection Recommendation.
- 4. Select Yes.

The Inspection Recommendation is deleted.

## Chapter 4

## Reference

#### **Topics:**

- Offline Inspection Families
- Inspection Field Data Collection
   URLs
- Overview Queries Folder

## **Offline Inspection Families**

The following baseline Inspection families are available in Inspection Field Data Collection:

Family Caption	Related Families Enabled for Offline Forms	Offline Form Caption
API 510 External Checklist	None	API 510 External Checklist Offline Form
API 510 Internal Checklist	None	API 510 Internal Checklist Offline Form
API 510 Internal Exchanger Checklist	None	API 510 Internal Exchanger Checklist Offline Form
API 570 External Checklist	None	API 570 External Checklist Offline Form
API 653 External Checklist	None	API 653 External Checklist Offline Form
API 653 Internal Checklist	None	API 653 Internal Checklist Offline Form
Bundle Sub-Inspection	None	Bundle Sub-Inspection Offline Form
Checklist Finding	None	Checklist Finding Offline Form
External PRD Checklist	None	External PRD Checklist Offline Form
Full Inspection	Bundle Sub-Inspection, Pressure Test Sub-Inspection, General Finding	Full Inspection Offline Form
General Finding	None	General Finding Offline Form
General Inspection	Pressure Test Sub-Inspection, General Finding	General Inspection Offline Form
Inspection Recommendation	None	Inspection Recommendation
PRD Pop Test Checklist	None	PRD Pop Test Checklist Offline Form
Pressure Test Sub Inspection	None	Pressure Test Sub-Inspection Offline Form

#### **Field Behavior for Offline Inspections**

In order for any field to work in offline forms, baseline behaviors are defined for required fields.

**Important:** If you have customized any of the following behaviors in previous versions of GE Digital APM, then your customizations will be overwritten with the offline baseline behaviors listed below.

Offline Family	Field Caption	Field Behavior	<b>Resulting Offline Behavior</b>
Bundle Inspection	Action This Inspection	Default Value	The literal value NO ACTION.
		Valid Value	Populated by the MI BUNDLE ACTION System Code and Table.
	Bundle Type	Valid Value	Populated by the MI BUNDLE TYPE System Code and Table.
	Total Number of Tubes in Bundle	Default Value	The literal value 0.
	Tubes Plugged During This Inspection	Default Value	The literal value 0.
	Tubes (Plugged At Start) Replaced	Default Value	The literal value 0.
	Tubes Plugged at Inspection Start	Default Value	The literal value 0.
	Tubes (Not Previously Plugged) Replaced	Default Value	The literal value 0.
Checklist Finding	Action Taken Code	Default Value	The literal value NONE.
		Valid Value	Populated by the FROM MI ACTION System Code and Table where the value in the MI INSPECTION REFERENCES field equals INSPECTION FINDING ACTION.
	Deterioration Mechanism	Valid Value	Populated by the MI DAMAGE MECHANISM System Code and Table.
	Deterioration Mode	Valid Value	Populated by the MI DAMAGE MODE System Code and Table.
	Туре	Default Value	The literal value OBSERVATION.
		Valid Value	Populated by the MI FINDING TYPE System Code and Table.

Offline Family	Field Caption	Field Behavior	<b>Resulting Offline Behavior</b>
Inspection	Asset ID	Disable Value	Always disabled.
	Equipment Operating State	Valid Value	Populated by the FROM MI EQUIP OP STATE System Code and Table where the value in the MI INSPECTION REFERENCES field equals INSPECTION EQUIPMENT STATE.
	Functional Location ID	Disable Value	Always disabled.
Inspection Recommendation	Asset ID	Disable Value	Always disabled.
	Functional Location ID	Disable Value	Always disabled.
	Recommendation ID	Disable Value	Always disabled.
	Target Completion Date	Required	Always required.
PRD Pop Test Checklist	As Found Pop Pressure	Validation	Greater than or equal to 0.
	As Left Pop Pressure	Validation	Greater than or equal to 0.
	Design Set Pressure	Validation	Greater than or equal to 0.
	Leak Category	Valid Value	Populated by the MI INSPECTION LEAK CATEGORY System Code and Table.
	Leak Test Results	Valid Value	Populated by the FROM MI INSPECTION RESULT System Code and Table where the value in the MI RBI REFERENCES field equals MI INSP RESULTS LEAK.
	Over Pressure Test Results	Valid Value	Populated by the FROM MI INSPECTION RESULT where the value in the MI RBI REFERENCES field equals MI INSP RESULTS OVER PRESSURE.
	Test Media (Shell)	Valid Value	Populated by the MI TEST MEDIA System Code and Table.
	Test Media (Tube)	Valid Value	Populated by the MI TEST MEDIA System Code and Table.

## **Inspection Field Data Collection URLs**

There is one URL route associated with Inspection Field Data Collection: **im/offline**. The following table describes the various paths that build on the route, and the elements that you can specify for each.

Element	Description	Accepted Value(s)	Notes	
im/offline/overview: Displays t	im/offline/overview: Displays the Inspection Field Collection page.			
im/offline/form/ <formfamilykey>/inspection/<inspectionentitykey>: Displays the offline Inspection Details section for the selected inspection.</inspectionentitykey></formfamilykey>			spection Details section for the	
<formfamilykey></formfamilykey>	Specifies the Offline Inspection Form that you want to view.	Any related Form Family Key.	N/A	
<inspectionentitykey></inspectionentitykey>	Specifies the Inspection for which you want to view information.	Any related Inspection Entity Key.	N/A	

#### **Example URL**

Example URL	Destination
im/offline/form/2052484/inspection/3221525	The offline Inspection Details section of the inspection.

## **Overview Queries Folder**

The Catalog folder \\Public\Meridium\Modules\Inspection\Overview Queries contains queries that are used on the Inspection Field Data Collection Overview page.

The following table provides a list of queries that are used on the **Inspection Field Data Collection Overview** page along with a list of required fields and their alias names for each query.

**Important:** The queries in the table below may have one or more required fields or parameters. When using the queries:

- Do not remove the required fields from a query.
- Do not change the alias of the required fields.
- Do not modify the order of required fields.
- Do not modify the IDs of the query parameters.

If you do so, you cannot perform certain operations in the **Inspection Field Data Collection Overview** page.

Query Name	Behavior and Usage	Required Fields
All Downloaded Inspections	Returns a list of inspections which are currently downloaded for Inspection Field Data Collection.	ENTY_KEY (Alias Name: ENTY_KEY)
User Downloaded Inspections	Returns a list of open inspections where the current user is the Inspection Report Owner or Inspection Report Reviewer. This query is used to display results in the <b>My Open Inspections</b> section of the <b>Inspection Field Data Collection</b> Overview page.	ENTY_KEY (Alias Name: Inspection Entity Key MI_INSP_001_LOCK_INSP_L (Alias Name: Inspection Lock) MI_INSP_001_DWNLDED_F (Alias Name: Downloaded)
User Downloaded Inspections (including team members)	Returns a list of open inspections where the current user is the Inspection Report Owner, Inspection Report Reviewer, or a member of the team assigned to the Inspection Report. This query can be used to display results in the <b>My Open Inspections</b> section of the <b>Inspection Field Data Collection</b> <b>Overview</b> page by copying the SQL code from the query editor into the query located at \\Public\Meridium \Modules\Inspection \Overview Queries\Users Downloaded Inspections.	ENTY_KEY (Alias Name: Inspection Entity Key MI_INSP_001_LOCK_INSP_L (Alias Name: Inspection Lock) MI_INSP_001_DWNLDED_F (Alias Name: Downloaded)

# Chapter 5

## **Release Notes**

**Topics:** 

• Second Quarter of 2020

## Second Quarter of 2020

### V4.4.0.0.0

This topic provides a list of product changes released for this module in this version.

#### **Table 1: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
The Inspection Field Data Collection module has new enhancements in this release and enables you to perform the following actions:	F45130
<ul> <li>You can download an Inspection report from Inspection Field Data Collection Overview, under the new tab My Open Inspections.</li> <li>You can track the life cycle of a mobile inspection and find out if an inspection is currently downloaded, the last inspector who downloaded an inspection, and the last inspector who synced the inspection to APM.</li> </ul>	
<ul> <li>You can now remove a downloaded inspection from your mobile device.</li> </ul>	
• An Inspection Administrator can re-enable inspection reports that are currently downloaded to a device. Re-enabling an Inspection report allows the Inspection report to be downloaded by another inspector.	
An Inspection Administrator has an option to disable the Inspection Recommendation workflow from Inspection Field Data Collection.	