



GUDID Global Unique Device
Identification Database

HL7 SPL Submission Option

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Learning Objectives

- Obtain an overview of the GUDID HL7 SPL Submission option
- Understand the required testing and process steps
- Learn about the FDA Electronic Submissions Gateway (ESG)
- Identify and understand the three acknowledgements you'll receive
- Learn key pointers regarding editing GUDID HL7 SPL submissions
- Understand who and when to contact for help

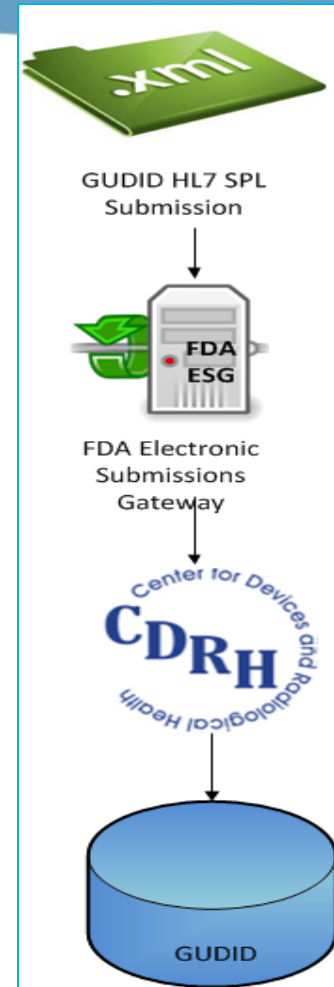
GUDID HL7 SPL Submission Option

Definitions:

HL7 = Health Level 7

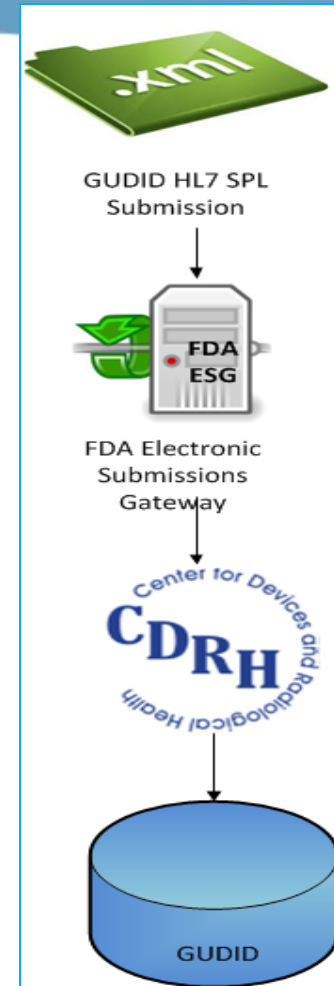
SPL = Structured Product Labeling

- Submission of medical device information as HL7 SPL XML message file
 - One DI record per XML file
- Technical specifications available on the UDI website



GUDID HL7 SPL Submission Option

- HL7 SPL XML submissions sent via the FDA Electronic Submissions Gateway (ESG)
- Testing required prior to production submission
- Suitable for labelers with large volume of submissions



FDA Electronic Submissions Gateway

- Enables secure receipt and authentication of FDA electronic regulatory submissions
- Routes submissions to the appropriate Center
 - Only one ESG account is needed for all submissions to all Centers



FDA Electronic
Submissions
Gateway

FDA Electronic Submissions Gateway

- Two Options for submission
 - **WebTrader** - use for Low Volume
 - **AS2** – use for High Volume
- If you choose **WebTrader**:
 - use GUDID Web Interface, instead of HL7 SPL submissions
- GUDID does not use eSubmitter tool used for CDRH eMDR submissions



FDA Electronic
Submissions
Gateway

FDA Electronic Submissions Gateway

- Acknowledgements for each stage of report transmission
- www.fda.gov/esg
- Note Proper Codes
 - **Center** = CDRH
 - **Submission Type** = GUDID



FDA Electronic
Submissions
Gateway

Acknowledgements (Ack)

Center = CDRH

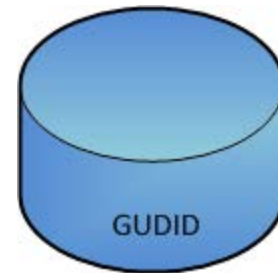
Submission Type = GUDID



Labelers



ESG



CDRH

Acknowledgements (Ack)

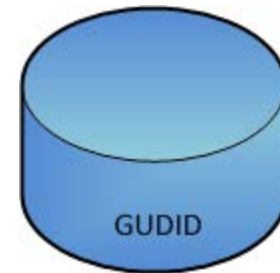
Center = CDRH
Submission Type = GUDID



Labelers



ESG



CDRH

Acknowledgements (Ack)

Center = CDRH

Submission Type = GUDID



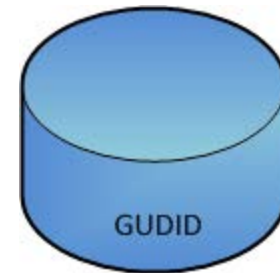
Labelers



ESG



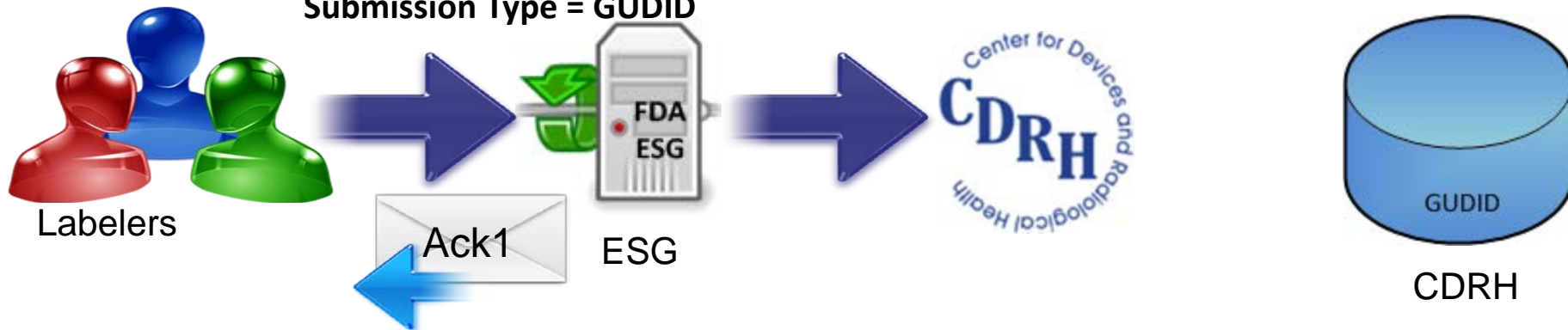
Ack1



CDRH

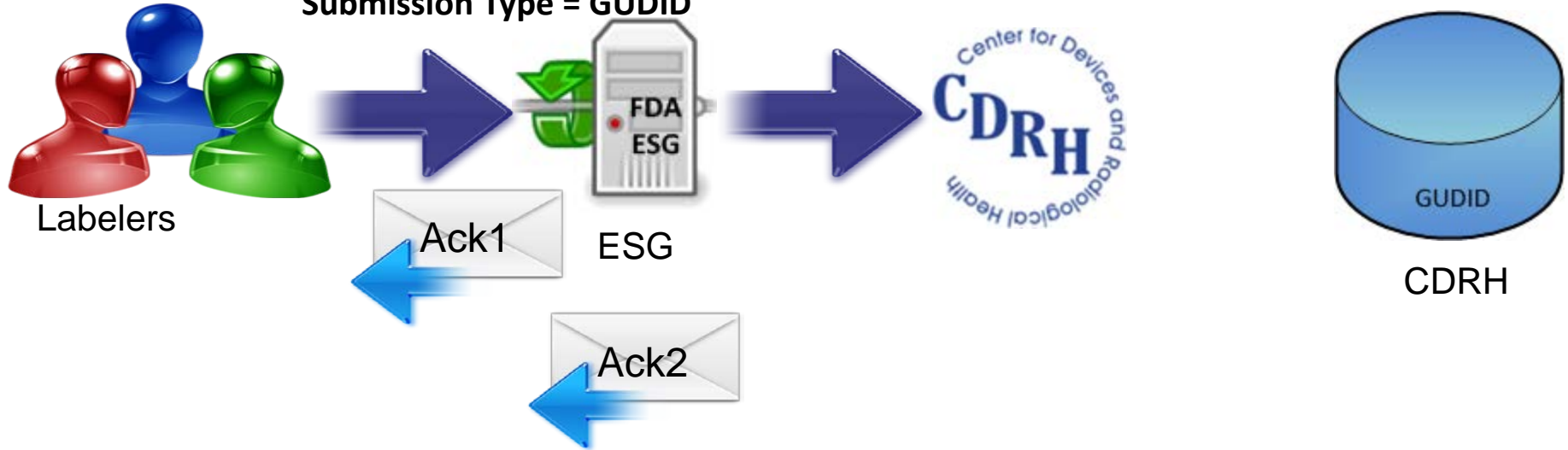
Acknowledgements (Ack)

Center = CDRH
Submission Type = GUDID



Acknowledgements (Ack)

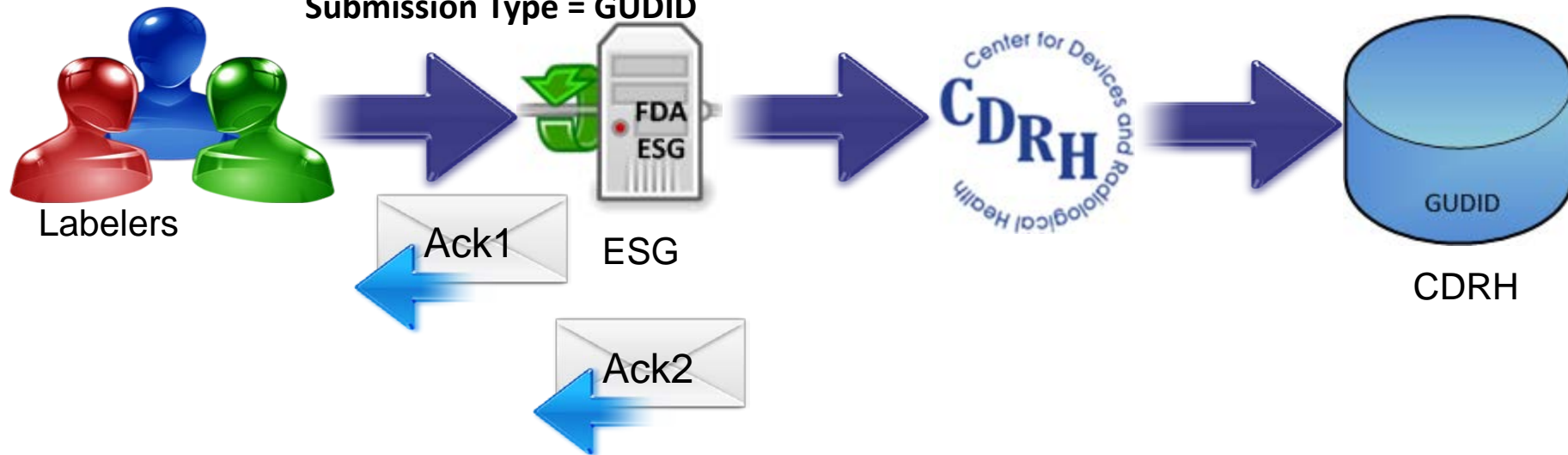
Center = CDRH
Submission Type = GUDID



Acknowledgements (Ack)

Center = CDRH

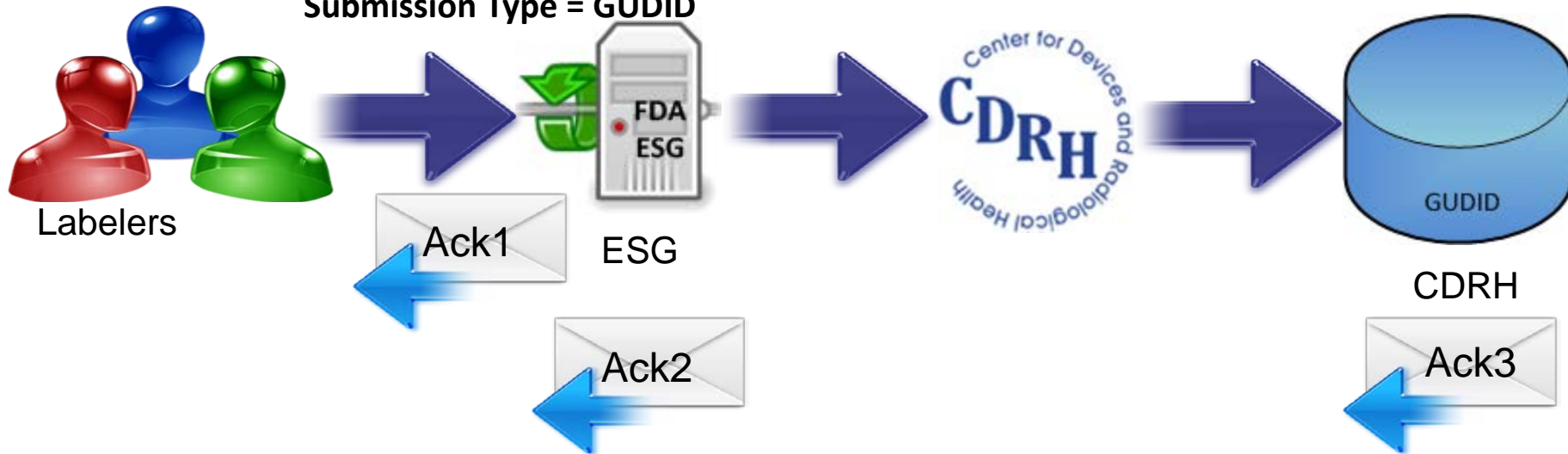
Submission Type = GUDID



Acknowledgements (Ack)

Center = CDRH

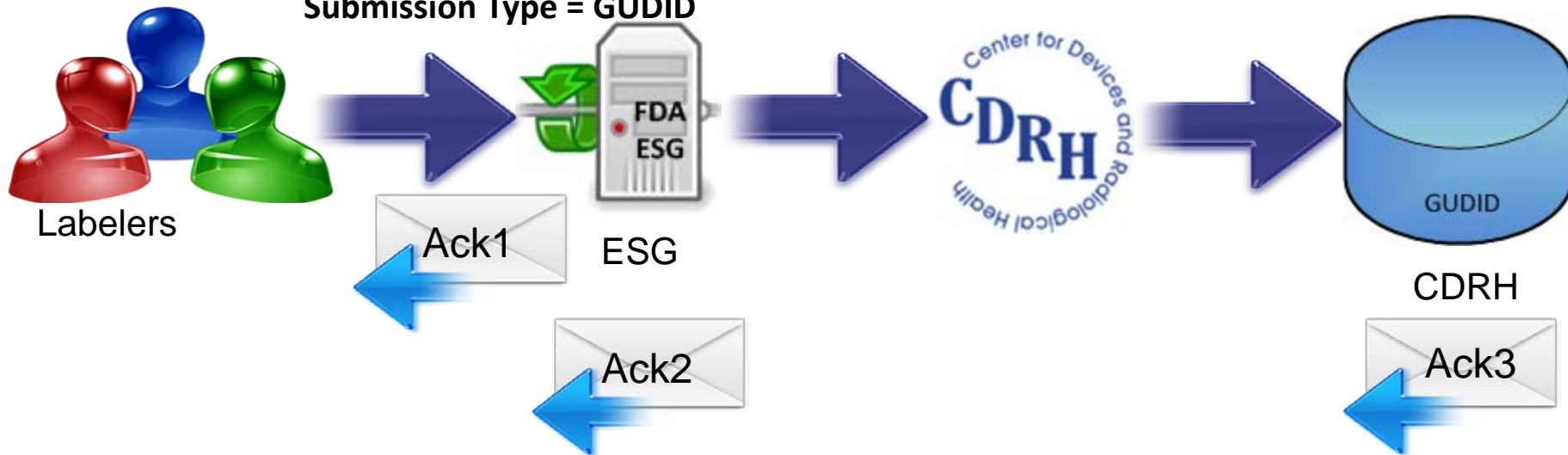
Submission Type = GUDID



Acknowledgements (Ack)

Center = CDRH

Submission Type = GUDID

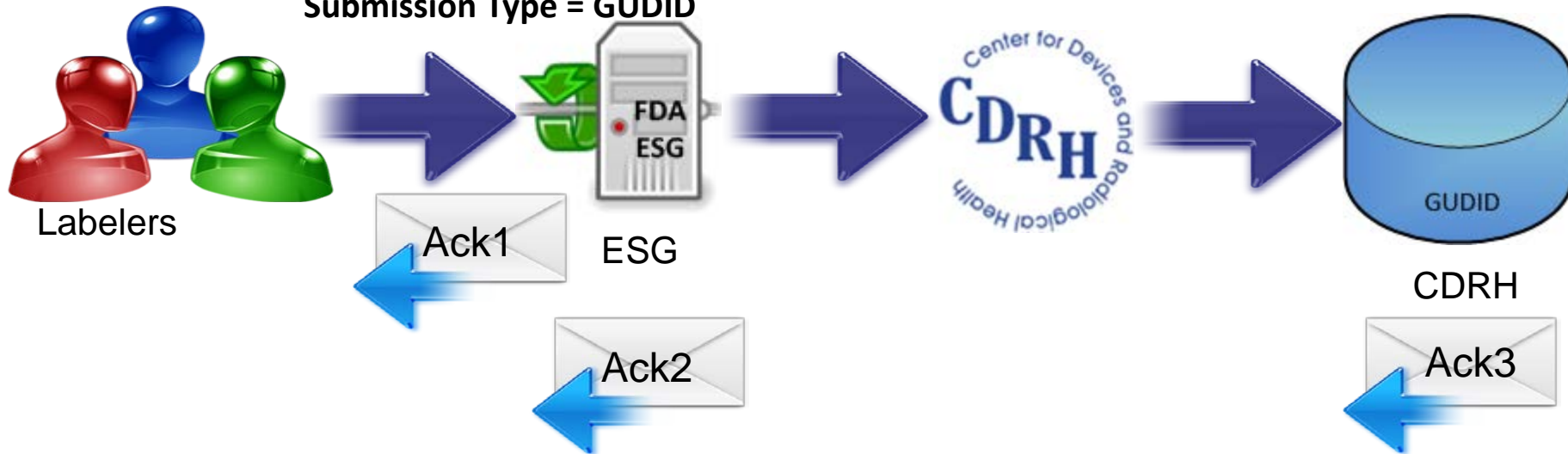


for Ack1 and Ack2 Issues: contact **FDA ESG Help Desk**, esghelpdesk@fda.hhs.gov

Acknowledgements (Ack)

Center = CDRH

Submission Type = GUDID



for Ack1 and Ack2 Issues: contact **FDA ESG Help Desk**, esghelpdesk@fda.hhs.gov

for Ack3 Issues: contact **FDA UDI Help Desk**, gudidsupport@fda.hhs.gov

Acknowledgement Types: Ack1

Ack1/Receipt/MDN

This MDN (Message Disposition Notification) was automatically built on Tue, 25 Mar 2014 23:36:26 GMT in response to a message with id <20425118.41395790583689> JavaMail:John.ADAMS@ABC1234567> received from ZZFDATST on Tue, 25 Mar 2014 23:36:25 GMT.
Unless stated otherwise, the message to which this MDN applies was successfully processed.

Acknowledgement Types: Ack1, Ack2

Ack1/Receipt/MDN

```
This MDN (Message Disposition Notification) was automatically built on
Tue, 25 Mar 2014 23:36:26 GMT in response to a
message with id <20425118.41395790583689> JavaMail:John.ADAMS@ABC1234567> received from
ZZFDATST on Tue, 25 Mar 2014 23:36:25 GMT.
Unless stated otherwise, the message to which this MDN applies
was successfully processed.
```

Ack2

```
MessageId:<20425118.41395790583689> JavaMail:John.ADAMS@ABC1234567>
CoreId: ci1395790584826.2538@fdsu105622_te2
DateTime Receipt Generated: 03-25-2014, 19:36:52
File Count: 1Directory Count: 2

CDRH has received your submission
```

Acknowledgement Types: Ack1, Ack2

Ack1/Receipt/MDN

This MDN (Message Disposition Notification) was automatically built on Tue, 25 Mar 2014 23:36:26 GMT in response to a message with id <20425118.41395790583689> JavaMail:John.ADAMS@ABC1234567> received from ZZFDATST on Tue, 25 Mar 2014 23:36:25 GMT. Unless stated otherwise, the message to which this MDN applies was successfully processed.

Ack2

MessageId:<20425118.41395790583689> JavaMail:John.ADAMS@ABC1234567>
 CoreId: ci1395790584826.2538@fdsu105622_te2
 DateTime Receipt Generated: 03-25-2014, 19:36:52
 File Count: 1Directory Count: 2
 CDRH has received your submission

Acknowledgement Types: Ack3

Ack3

```

- <submission>
  <coreId>ci1395790584826.2538@fdsul05622_te2</coreId>
  <batchId>2</batchId>
  <dateEntered>03-25-2014, 19:36:52</dateEntered>
  <numReportFailed>0</numReportFailed>
  <numReportPassed>1</numReportPassed>
  - <report id="1111111100010">
    <status>passed</status>
  </report>
</submission>

```

Acknowledgement Types: Ack3

Ack3

```

- <submission>
  <coreId>ci1395790584826.2538@fdsul05622_te2</coreId>
  <batchId>2</batchId>
  <dateEntered>03-25-2014, 19:36:52</dateEntered>
  <numReportFailed>0</numReportFailed>
  <numReportPassed>1</numReportPassed>
  - <report id="11111111100010">
    <status>passed</status>
  </report>
</submission>
  
```



If Ack3 shows **<status>failed</status>**

```
<html><body><p>Unidentified or unparseable submission type [CoreID]</p></body></html>
```

Acknowledgement Types: Ack3

Ack3

```

- <submission>
  <coreId>ci1395790584826.2538@fidsul05622_te2</coreId>
  <batchId>2</batchId>
  <dateEntered>03-25-2014, 19:36:52</dateEntered>
  <numReportFailed>0</numReportFailed>
  <numReportPassed>1</numReportPassed>
  - <report id="11111111100010">
    <status>passed</status>
  </report>
</submission>
  
```

Unidentified: we do not know where to route it
Unparseable: fails validation against the schema

If Ack3 shows **<status>failed</status>**

```
<html><body><p>Unidentified or unparseable submission type [CoreID]</p></body></html>
```

Acknowledgements (Ack)



Ack1/2 Issues

- esghelpdesk@fda.hhs.gov
- Ack1 – Provide info
- Ack2 – Provide messageID

GUDID Global Unique Device
Identification Database

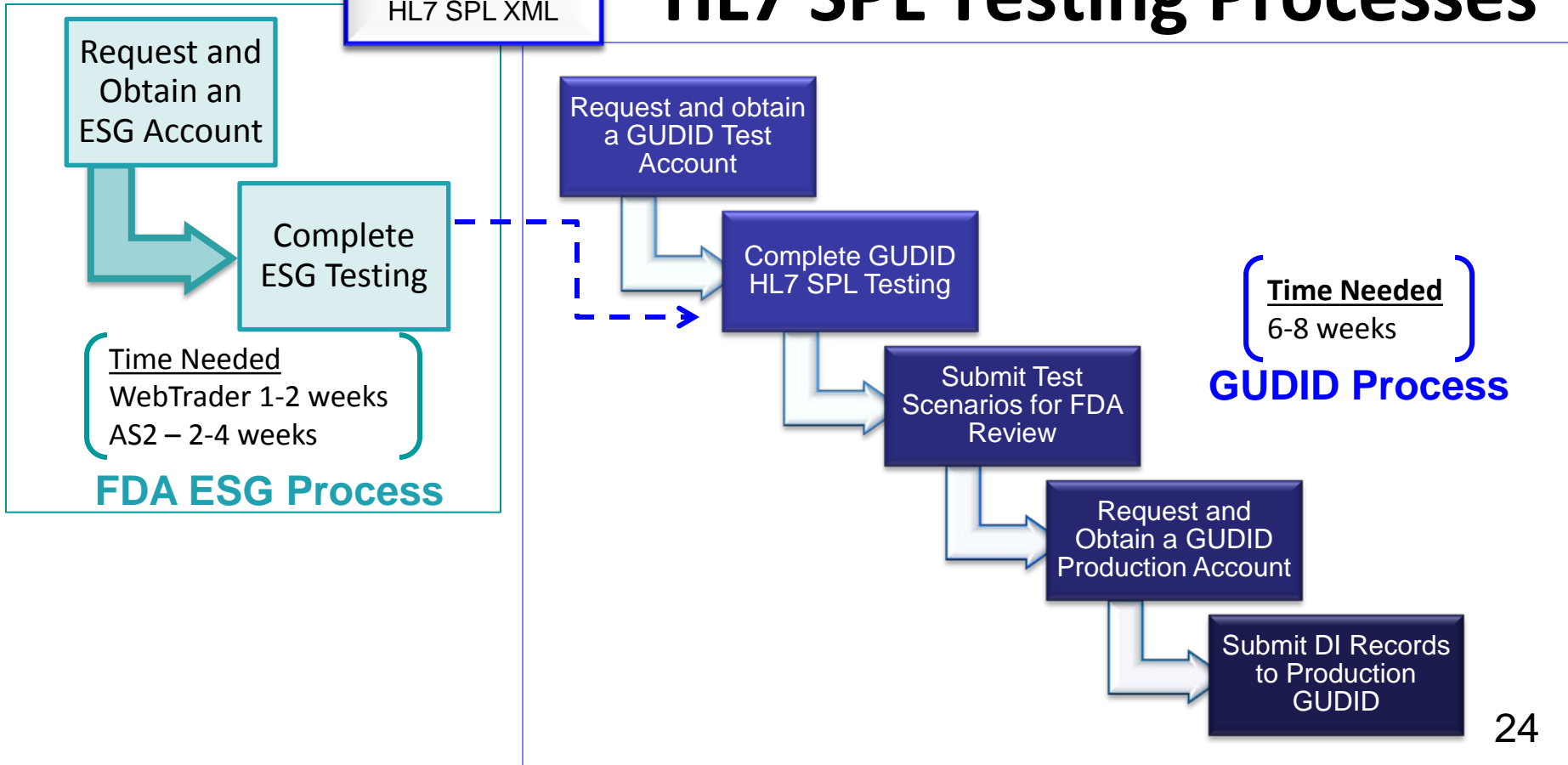
Ack3 Issues

- gudidsupport@fda.hhs.gov
- Provide coreID

Contact appropriate Helpdesk regarding issues prior to retransmitting

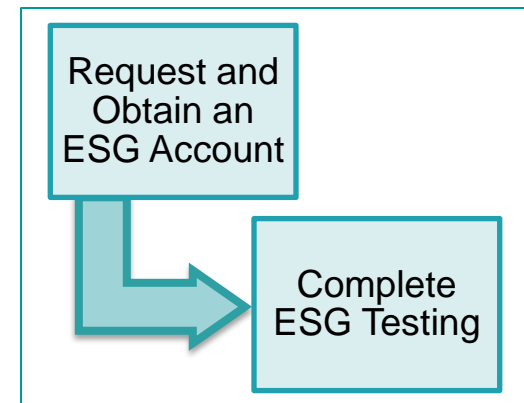
Gather Data,
Generate GUDID
HL7 SPL XML

HL7 SPL Testing Processes



ESG Testing Process

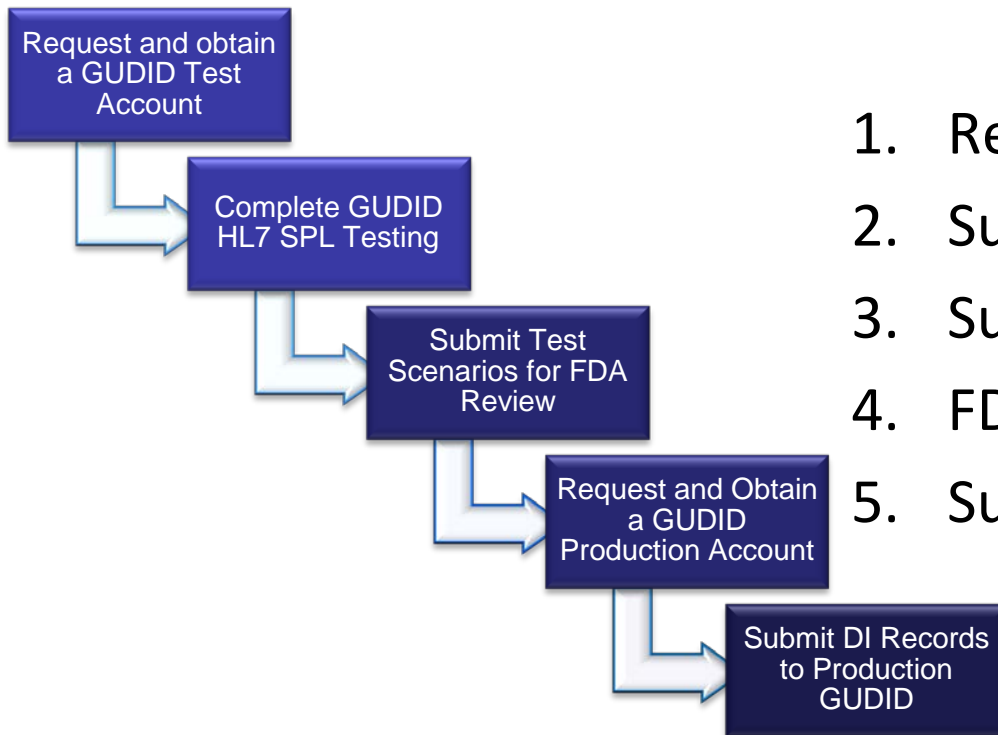
- **Request and Obtain a test ESG account**
 - Obtain a digital certificate
 - Send letter of non-repudiation
- **Complete ESG testing**
 - Connectivity test
 - Load test
- **Allocate 2-4 weeks for the above**
- **May Use Existing ESG test accounts**
- **For all GUDID submissions, be sure to specify:**
 - Center = **CDRH**
 - Submission Type = **GUDID**



Generate XML Files

- **Build and generate GUDID HL7 SPL XML files**
 - One file for each DI record
 - Validate files against the GUDID schema
- **Unparseable error**
 - Most common error during GUDID testing from users
 - Validating files against the GUDID schema will save you time

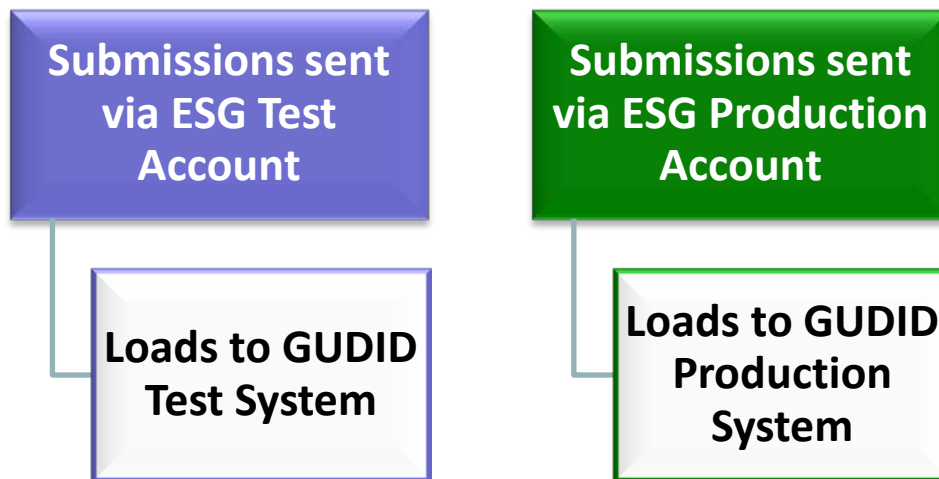
GUDID Testing Process



1. Request a GUDID test account
2. Submit XML files with test scenarios
3. Submit test results to UDI Helpdesk
4. FDA reviews and provides feedback
5. Submit to Production

ESG and GUDID

- ESG serves the entire FDA (all FDA Centers and Programs)
- ESG and GUDID have Test and Production areas



Labelers Using Third-Party Submitters

- **Provide Third-Party information during GUDID account request**
 - If third party is not associated to labeler's GUDID account, submission from third party will be rejected
- **Third Parties may:**
 - Provide software solution/tool to labeler to generate HL7 SPL XML files, and then labeler sends submission via ESG
 - Labeler obtains ESG account
 - Provide end-to-end solution: use labeler data to generate GUDID HL7 SPL XML files AND send submissions via ESG on behalf of labeler
 - Third-party has the ESG account

Labelers and Third-Party Submitters

- Labelers who intend to use the HL7 SPL submission option:
 - must complete GUDID testing
 - even if using a third-party submitter
- Labelers are responsible for fulfilling GUDID submission requirements:
 - Ensure submissions received and processed by FDA.
 - Login to GUDID and review your submissions
 - Report within the required timeframe
 - Maintain proper record keeping

Third-Party Solution Providers

- **May test GUDID HL7 SPL submission solution independently of Labelers**
 - Request a GUDID test Account: indicate it is for HL7 SPL testing
 - Dummy data for certain required attributes provided for testing purposes ONLY, upon request
 - GUDID Web Interface and Production Accounts NOT provided
- **Must complete GUDID HL7 SPL testing with each labeler**
 - Labelers must establish their own separate test GUDID account

GUDID HL7 SPL Pointers

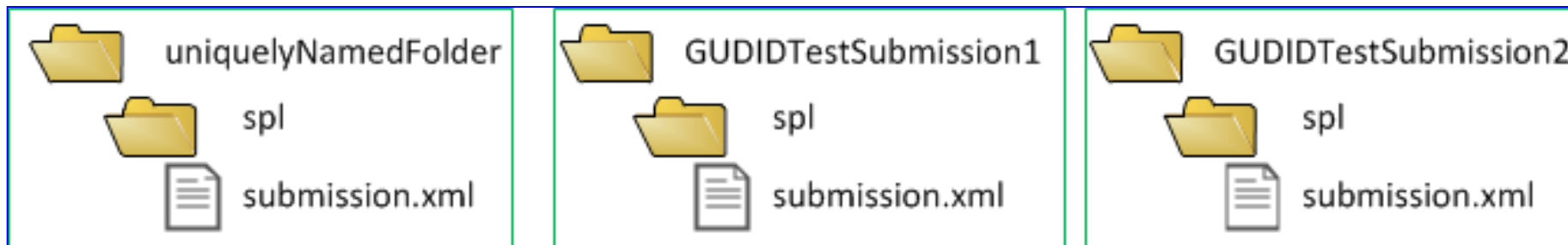
- **Read FDA Guidance on GUDID**
 - www.fda.gov/downloads/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/UCM369248.pdf
- **Allow adequate time for testing – ESG and GUDID**
- **GUDID testing completion criteria is the bare minimum**
 - Do thorough internal testing to ensure the scenarios appropriate for your products are accounted for

GUDID HL7 SPL Pointers

- **Validate submissions against the GUDID HL7 SPL schema**
- **Do not submit sample message in the HL7 SPL implementation package as a test submission – it is not validated**
- **Specify Proper Fields**
 - Center = **CDRH**
 - Submission Type = **GUDID**

GUDID HL7 SPL Pointers

- **Submission folder structure must be followed**
 - Top level folder must be uniquely named
 - Lower level folder must always be named “spl”; only 1 “spl” folder
 - GUDID HL7 SPL xml submission file must be named “submission.xml”
 - Do not include any other files in the “spl” folder
- **Only one submission (one DI record) in each folder structure**



GUDID HL7 SPL Pointers

- Draft DI record state not available in HL7 SPL submission option
- Records can be submitted as
 - **Unpublished** = DI Record Publish Date is in the future
 - **Published** = DI Record Publish Date is today
 - **Review your submission via the Web Interface**
 - Login as a Labeler Data Entry (LDE) user
 - Labeler DUNS number for that DI record should be assigned to you

Device Identifier Record History			
Last Modified Date	Time	DI #	Modified By
Mar 21, 2014	5:03 PM	10020030050373	SPL USER

Data Quality

- **Before you move to production**
 - Complete adequate internal testing
 - Verify test records are loaded correctly to GUDID by logging in
- **After you move to production**
 - Continue to monitor, review and correct records during grace period
 - Review information during Grace Period and make edits as needed
 - Use “export” feature to export all records in GUDID as XML files
 - Remember records go to ***AccessGUDID*** after Grace Period

Data Quality

- **Labeler is ultimately responsible for information submitted to GUDID**
 - it does not matter if third party generates or submits

Editing HL7 SPL Submissions

- **Submit the entire DI record, i.e., include changed and unchanged attributes**
 - DI record will be over-written with the most recent file
 - document.setID – links all related submissions
 - document.versionNumber – tracks versions; increment by 1 for each edit, even for failed submissions
 - First time submission, **versionNumber** = 1, Ack3 = Fail
 - Increment **versionNumber** = 2 before resubmitting

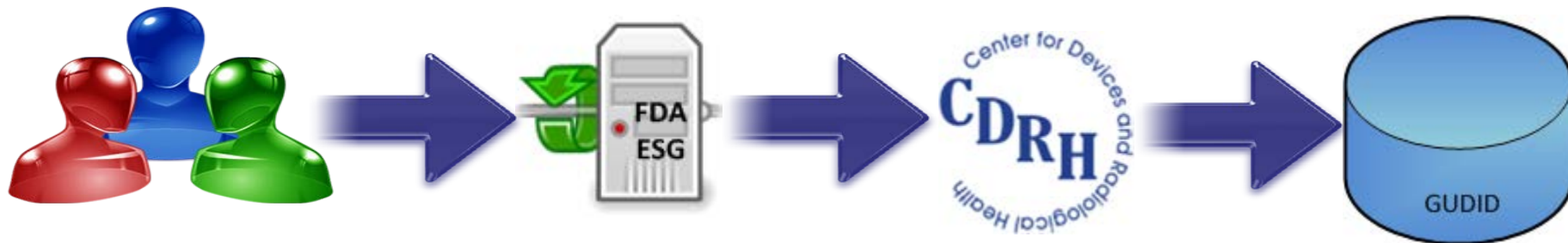
Editing DI Records

- **DI Records submitted using Web Interface**
 - Draft, Unpublished, Published during Grace Period → **must** edit via [Web Interface](#)
 - Published and past Grace Period → **may** edit via [Web Interface](#) or [HL7 SPL](#)

- **DI Records submitted using HL7 SPL**
 - Any state, any time → **may** edit via [Web Interface](#) or [HL7 SPL](#)

Submitting Batches in Production

- Start submissions in small batches and slowly ramp up
- Limit submissions to no more than 500 at one time
- If you do not receive Acknowledgements, do not automatically “resend”, contact us first



GUDID System Status

- **Scheduled Downtimes**

- will be posted on www.fda.gov/udi
- look for GUDID System Status

- **Unscheduled Downtimes**

- visit www.fda.gov/udi for information
- if no information, report issue via Help Desk

- **Subscribe to GUDID Email Alerts**

Summary

- Understand the HL7 SPL Submission Process
- Understand the Testing Requirements for ESG and GUDID
- Understand the edit rules to manage your records correctly and accurately
- Understand whom to contact and when for help

Providing Industry Education

1. CDRH Learn – Multi-Media Industry Education

- over 80 modules - videos, audio recordings, power point presentations, software-based “how to” modules
- accessible on your portable devices: <http://www.fda.gov/Training/CDRHLearn>

2. Device Advice – Text-Based Education

- comprehensive regulatory information on premarket and postmarket topics: <http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance>

3. Division of Industry and Consumer Education (DICE)

- If you have a question - Email: DICE@fda.hhs.gov
- Phone: 1(800) 638-2041 or (301) 796-7100 (Live Agents 9am – 12:30 pm; 1-4:30 pm EST)
- **Web Homepage:**
<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/ContactUs--DivisionofIndustryandConsumerEducation/default.htm>