

# Nasdaq Calypso

ICE Link Release Notes

October 2024 Approved

#### This document describes functionality changes in the ICE Link module.

▶ Please refer to the Calypso ICE Link Integration Guide for information on installing the ICE Link Interface.



# Document History

Published	Summary of Changes
June 2013	Changes for 2.0.1 Release
July 2013	Changes for 2.0.2 Release
October 2013	Changes for 2.0.3, 2.1.0 Release
December 2013	Changes for 2.1.0 Release
January 2014	Changes for 2.1.1 Release
March 2014	Changes for 2.1.2 Release
June 2014	Changes for 2.2.0 Release
July 2014	Changes for 2.2.1 Release
September 2014	Changes for 2.3.0 Release
July 2015	Changes for 2.4.0, 2.5.0 Release
November 2015	Changes for 2.6.0 Release
December 2015	Changes for 2.3.1 Release
June 2016	Changes for 2.7.0 Release
July 2016	Changes for 2.8.0 Release
August 2016	Changes for 2.9.0 Release
December 2016	Changes for 2.10.0 Release
February 2017	Changes for 2.11.0 Release



Published	Summary of Changes
April 2017	Changes for 2.11.1 Release
July 2017	Changes for 2.12.0 Release
September 2017	Changes for 2.12.1 Release
October 2017	Changes for 2.12.2 Release
December 2017	Changes for 2.13.0 Release
December 2017	Changes for 2.14.0 Release
February 2018	Changes for 2.15.0, 2.15.1 Release
March 2018	Changes for 2.15.2 Release
November 2018	Changes for 2.16.0 Release and 2.17.1 Release
May 2019	Changes for 2.17.2 Release, 2.18.0 Release, 2.18.1 Release, 2.18.2 Release
September 2019	Changes for 2.18.3 Release
October 2019	Changes for 2.15.3 Release
February 2020	Changes for 3.0.0 Release
March 2020	Changes for 3.0.1 Release
May 2020	Changes for 3.0.2 Release
November 2020	Changes for 3.1.0 Release
February 2021	Changes for 3.2.0 Release
June 2021	Changes for 3.3.0 Release



Published	Summary of Changes					
August 2021	Changes for 3.4.0, 3.0.3, 3.3.1 Release					
September 2021	Changes for 3.5.0 Release					
December 2021	Version 3.6.0 – Technical release only					
January 2022	Version 4.0.0, 4.0.1 - Technical release only – Version 17.0 compatibility					
March 2022	Version 4.1.0 - Technical release only – Code review					
May 2022	Version 4.2.0					
June 2022	Version 3.7.0					
August 2022	Version 4.3.0 – Technical release only Version 3.8.0					
December 2022	Version 3.3.2, 4.4.0					
January 2023	Version 3.9.0, 4.5.0					
October 2023	Version 4.6.0					
January 2024	Version 5.3.0 – Technical release only – Compatibility with version 18					
February 2024	Version 5.4.0 – Technical release only					
June 2013	Changes for 2.0.1 Release					
July 2013	Changes for 2.0.2 Release					
October 2013	Changes for 2.0.3, 2.1.0 Release					
December 2013	Changes for 2.1.0 Release					



Published	Summary of Changes
January 2014	Changes for 2.1.1 Release
March 2014	Changes for 2.1.2 Release
June 2014	Changes for 2.2.0 Release
July 2014	Changes for 2.2.1 Release
September 2014	Changes for 2.3.0 Release
July 2015	Changes for 2.4.0, 2.5.0 Release
November 2015	Changes for 2.6.0 Release
December 2015	Changes for 2.3.1 Release
June 2016	Changes for 2.7.0 Release
July 2016	Changes for 2.8.0 Release
August 2016	Changes for 2.9.0 Release
December 2016	Changes for 2.10.0 Release
February 2017	Changes for 2.11.0 Release
April 2017	Changes for 2.11.1 Release
July 2017	Changes for 2.12.0 Release
September 2017	Changes for 2.12.1 Release
October 2017	Changes for 2.12.2 Release
December 2017	Changes for 2.13.0 Release



Published	Summary of Changes
December 2017	Changes for 2.14.0 Release
February 2018	Changes for 2.15.0, 2.15.1 Release
March 2018	Changes for 2.15.2 Release
November 2018	Changes for 2.16.0 Release and 2.17.1 Release
May 2019	Changes for 2.17.2 Release, 2.18.0 Release, 2.18.1 Release, 2.18.2 Release
September 2019	Changes for 2.18.3 Release
October 2019	Changes for 2.15.3 Release
February 2020	Changes for 3.0.0 Release
March 2020	Changes for 3.0.1 Release
May 2020	Changes for 3.0.2 Release
November 2020	Changes for 3.1.0 Release
February 2021	Changes for 3.2.0 Release
June 2021	Changes for 3.3.0 Release
August 2021	Changes for 3.4.0, 3.0.3, 3.3.1 Release
September 2021	Changes for 3.5.0 Release
December 2021	Version 3.6.0 – Technical release only
January 2022	Version 4.0.0, 4.0.1 - Technical release only – Version 17.0 compatibility
March 2022	Version 4.1.0 - Technical release only – Code review



Published	Summary of Changes
May 2022	Version 4.2.0
June 2022	Version 3.7.0
August 2022	Version 4.3.0 – Technical release only
	Version 3.8.0
December 2022	Version 3.3.2, 4.4.0
January 2023	Version 3.9.0, 4.5.0
October 2023	Version 4.6.0
January 2024	Version 5.3.0 – Technical release only – Compatibility with version 18
February 2024	Version 5.4.0 – Technical release only
May 2024	Version 5.5.0, 5.6.0 – Technical releases only
October 2024	Version 5.7.0



# **Table of Contents**

Introducti	ion	11
Release N	lotes	12
2.1	Changes in 5.5.0, 5.6.0 Release	12
2.2	Changes in 4.6.0 Release	13
2.3	Changes in 4.5.0 Release	13
2.4	Changes in 4.4.0 Release	13
2.5	Changes in 4.2.0 Release	14
2.6	Changes in 3.9.0 Release	14
2.7	Changes in 3.8.0 Release	15
2.8	Changes in 3.7.0 Release	15
2.9	Changes in 3.5.0 Release	15
2.10	Changes in 3.4.0 Release	16
2.11	Changes in 3.3.2 Release	16
2.12	Changes in 3.3.1 Release	16
2.13	Changes in 3.3.0 Release	17
2.14	Changes in 3.2.0 Release	17
2.15	Changes in 3.1.0 Release	17
2.16	Changes in 3.0.3 Release	17
2.17	Changes in 3.0.2 Release	18
2.18	Changes in 3.0.1 Release	18
2.19	Changes in 3.0.0 Release	18
2.20	Changes in 2.15.3 Release	19



2.21	Changes in 2.18.3 Release	19
2.22	Changes in 2.18.2 Release	. 20
2.23	Changes in 2.18.1 Release	. 20
2.24	Changes in 2.18.0 Release	. 20
2.25	Changes in 2.17.2 Release	. 20
2.26	Changes in 2.17.1 Release	21
2.27	Changes in 2.16.0 Release	21
2.28	Changes in 2.15.2 Release	21
2.29	Changes in 2.15.1 Release	. 22
2.30	Internal Release 2.15.0	. 22
2.31	Changes in 2.14.0 Release	. 22
2.32	Changes in 2.13.0 Release	. 22
2.33	Changes in 2.12.3 Release	. 23
2.34	Changes in 2.12.2 Release	. 23
2.35	Changes in 2.12.1 Release	. 23
2.36	Changes in 2.12.0 Release	. 23
2.37	Changes in 2.11.1 Release	. 24
2.38	Changes in 2.11.0 Release	. 24
2.39	Changes in 2.10.0 Release	. 24
2.40	Changes in 2.9.0 Release	. 24
2.41	Changes in 2.8.0 Release	. 25
2.42	Changes in 2.7.0 Release	. 25
2.43	Changes in 2.3.1 Release	. 25
2.44	Changes in 2.6.0 Release	. 25
2.45	Changes in 2.5.0 Release	. 25



2.46	Changes in 2.4.0 Release	26
2.47	Changes in 2.3.0 Release	26
2.48	Changes in 2.2.1 Release	27
2.49	Changes in 2.2.0 Release	27
2.50	Changes in 2.1.2 Release	28
2.51	Changes in 2.1.1 Release	28
2.52	Changes in 2.1.0 Release	28
2.53	Changes in 2.1.0 Release	29
2.54	Changes in 2.0.3 Release	29
2.55	Changes in 2.0.2 Release	30
2.56	Changes in 2.0.1 Release	31



# Introduction

This document contains a listing of new / changed features between each version release of the ICE Link module. It is intended for users who are upgrading from previous versions of the module, to see what has been changed and how it affects their existing environment. The separate Setup document contains the actual setup details for these new / changed features, as well as a Known Issues list, and should be used in tandem with this document when upgrading.

New users of the ICE Link module only require the separate Setup document and can safely ignore this document.



# Release Notes

# 2.1 Changes in 5.7.0 Release

Capability Group	Capability	Asset Class	Legacy Component	Case	APL	Issue	Туре	Issue
			ICE Link 5.7.0		APL-11372	ICELINK- 468	Sec	Issue – Security – Upgrade Jackson library to version 2.17.2.

# 2.2 Changes in 5.5.0, 5.6.0 Release

Capability Group	Capability	Asset Class	Legacy Component	Case	APL	Issue	Туре	Issue
			ICE Link 5.6.0			ICELINK- 460	Enh	Issue - Add ability to disable event persistence for the ICELink engine.
								Impact Analysis - You can add " icelink " to the environment property "calypso.features.disabled" to disable event persistence for the ICELink engine.



# 2.3 Changes in 4.6.0 Release

Capability Group	Capability	Asset Class	Legacy Component	Case	APL	Issue	Туре	Issue
			ICE Link 4.6.0		APL-6826	ICELINK- 447	Sec	Issue – Security - Upgrade com.fasterxml.jackson.core:jackson_core library to version 2.14.3.

# 2.4 Changes in 4.5.0 Release

Capab Group		bility	Asset Class	Legacy Component	Case	APL	Issue	Туре	Issue
Trade Integra	,		Cross	ICE Link 4.5.0	00034955		ICELINK- 433	Issue	Issue – Restructuring Type column of CDS trade is showing wrong value after restart of server.  Impact Analysis – Local impact to ICELinkCreditDefaultSwapMapper – Fixing mapping.

# 2.5 Changes in 4.4.0 Release

Capability Group	Capability	Asset Class	Legacy Component	Case	RPM/APL	Issue	Туре	Issue
			ICE Link 4.4.0			ICELINK- 428	Enh	Issue – Interfaces - Extend data and hashicorp property support to all applications.



Capability Group	Capability	Asset Class	Legacy Component	Case	RPM/APL	Issue	Туре	Issue
								Impact Analysis - Extended data and hashicorp property support to all applications.

# 2.6 Changes in 4.2.0 Release

Component	HD/Case	RPM	Issue	Туре	Description
ICE Link 4.2.0		RPM-7792	ICELINK-415	Sec	Issue – Security - Upgrade jackson-core libraries to version 2.13.0.

# 2.7 Changes in 3.9.0 Release

Capability Group	Capability	Asset Class	Legacy Component	Case	APL	Issue	Туре	Issue
Trade Integration	Trade Lifecycle Integration	Cross	ICE Link 3.9.0	00034955		ICELINK- 434	Issue	Issue – Restructuring Type column of CDS trade is showing wrong value after restart of server.  Impact Analysis – Local impact to ICELinkCreditDefaultSwapMapper – Fixing mapping.



# 2.8 Changes in 3.8.0 Release

Component	HD/Case	RPM	Issue	Туре	Description
ICE Link 3.8.0		RPM-10620	ICELINK-424	Sec	Issue – Security - Upgrade jackson-core libraries to version 2.13.3.

# 2.9 Changes in 3.7.0 Release

Component	HD/Case	RPM	Issue	Туре	Description
ICE Link 3.7.0		RPM-9923	ICELINK-416	Sec	Issue – Security - Upgrade jackson-core libraries to version 2.13.0.

# 2.10 Changes in 3.5.0 Release

Component	HD/Case	RPM	Issue	Туре	Description
ICE Link 3.5.0	00014918		ICELINK-398	Issue	Issue – Icelink API Connection error fills up the log file. Impact Analysis – Local impact to ICELinkEngine – Preventing unnecessary log. Already in version 3.3.1.
ICE Link 3.5.0		RPM-5914	ICELINK-396	Enh	Issue - Upgrade commons-lang libraries to version 3.12.0.



# 2.11 Changes in 3.4.0 Release

Component	HD/Case	RPM	Issue	Туре	Description
ICE Link 3.4.0		RPM-4313	ICELINK-391	Enh	Issue – Technical issue - Changes for using "internal" Data Uploader module.

# 2.12 Changes in 3.3.2 Release

Capability Group	Capability	Asset Class	Legacy Component	Case	APL	Issue	Туре	Issue
Trade Integration	Trade Lifecycle Integration	Cross	ICE Link 3.3.2	00034955		ICELINK- 432	Issue	Issue – Restructuring Type column of CDS trade is showing wrong value after restart of server.  Impact Analysis – Local impact to ICELinkCreditDefaultSwapMapper – Fixing mapping.

# 2.13 Changes in 3.3.1 Release

Component	HD/Case	Issue	Туре	Issue
ICE Link 3.3.1	00014918	ICELINK-398	Issue	Issue – Icelink API Connection error fills up the log file.  Impact Analysis – Local impact to ICELinkEngine – Preventing unnecessary log.



# 2.14 Changes in 3.3.0 Release

Component	HD/Case	Issue	Туре	Issue
ICE Link 3.3.0		ICELINK-382	Enh	Issue – Security - Upgrade library com.fasterxml.jackson.core:Jackson* to version 2.11.4.

# 2.15 Changes in 3.2.0 Release

Component	HD/Case	Issue	Туре	Issue
ICE Link 3.2.0		ICELINK-378	Enh	Issue – Upgrade library com.fasterxml.jackson.core:Jackson* to version 2.11.3.

# 2.16 Changes in 3.1.0 Release

Component	HD/Case	Issue	Туре	Issue
ICE Link 3.1.0		ICELINK-359	Enh	Issue – Upgrade library com.fasterxml.jackson.core:jackson-databind to version 2.10.2.

# 2.17 Changes in 3.0.3 Release

Component	HD/Case	Issue	Туре	Issue
ICE Link 3.0.3	00014918	ICELINK-387	Issue	Issue – Icelink API Connection error fills up the log file. Impact Analysis – Local impact to ICELinkEngine – Preventing unnecessary log.



#### 2.18 Changes in 3.0.2 Release

Component	HD/Case	Issue	Туре	Issue
ICE Link 3.0.2		ICELINK-358	Enh	Issue – Upgrade library com.fasterxml.jackson.core:jackson-databind to version 2.10.2.

#### 2.19 Changes in 3.0.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_8.1.0 and ICELinkAPI version 8.6.3.0 or higher.

Technical release.

#### 2.20 Changes in 3.0.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_8.1.0 and ICELinkAPI version 8.6.3.0 or higher.

Version	Component	HelpDesk	Issue	Туре	Description
3.0.0	ICE Link	178053	ICELINK-331	Issue	Issue – ICE Link Trades failed to be persisted due to Book lookup issue.
					Fix - Fixed the issue with the parent entity lookup for the PO when fetching the custom book in Calypso.
3.0.0	ICE Link		ICELINK-338	Issue	Issue - Compatibility with DTUP schema changes for trade ID.
3.0.0	ICE Link	178226 178225	ICELINK-346	Issue	Issue - Unable to terminate ICE CDX trade if it is netted as the system only processes the message which has the TerminatedDealParticipantDealId.



Version	Component	HelpDesk	Issue	Туре	Description
3.0.0	ICE Link		ICELINK-352	Enh	Issue - Upgrade vulnerable library apache-httpclient:commons-httpclient:3.1 to org.apache.httpcomponents:httpclient:4.5.8. httpclient:commons-httpclient:3.1 is no longer shipped with 16.1 Maintenance Releases.
3.0.0	ICE Link		ICELINK-354	Enh	Issue – Upgrade Jackson library to version 2.9.6.

#### 2.21 Changes in 2.15.3 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.2.12 and ICELinkAPI version 8.6.3.0 or higher.

Component	HD/Case	Issue	Туре	Issue	Component
2.15.3	ICE Link	178226 178225	ICELINK-346	Issue	Issue - Unable to terminate ICE CDX trade if it is netted as the system only processes the message which has the TerminatedDealParticipantDealId.

#### 2.22 Changes in 2.18.3 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_7.7.4 and ICELinkAPI version 8.6.3.0 or higher.

Component	HD/Case	Issue	Туре	Issue	Component
2.18.3	ICE Link 2.18.8	178226	ICELINK-347	Issue	Issue - Unable to terminate ICE CDX trade if it is netted as the system only processes the message which has the TerminatedDealParticipantDealId.



Component	HD/Case	Issue	Туре	Issue	Component
2.18.3	ICE Link 2.18.3		ICELINK-348	Enh	Issue – Jackson libraries upgrade to version 2.9.8.

#### 2.23 Changes in 2.18.2 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_7.7.4 and ICELinkAPI version 8.6.3.0 or higher.

ICELINK-337 - Compatibility with DTUP schema changes for trade ID.

#### 2.24 Changes in 2.18.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_7.7.3 and ICELinkAPI version 8.6.3.0 or higher.

• ICELINK-330 (HD178053) – ICE Link Trades failed to be persisted due to Book lookup issue. Fixed the issue with the parent entity lookup for the PO when fetching the custom book in Calypso.

#### 2.25 Changes in 2.18.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_7.7.0 and ICELinkAPI version 8.6.3.0 or higher.

• ICELINK-321 - Compatibility version with SQL binding API.

#### 2.26 Changes in 2.17.2 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_7.3.1 and ICELinkAPI version 8.6.3.0 or higher.

• ICELINK-323 - Compatibility version with SQL binding API.



#### 2.27 Changes in 2.17.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_7.3.1 and ICELinkAPI version 8.6.3.0 or higher.

• Added support for SQL binding API. As per changes in Calypso 16.1 we have made the ICE Link module compliant with the same.

#### 2.28 Changes in 2.16.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_7.0.0 and ICELinkAPI version 8.6.3.0 or higher.

• Added support for Long Id for trades. As per changes in Calypso 16.0 we have made the ICE Link module compliant with the same.

#### 2.29 Changes in 2.15.2 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.2.12 and ICELinkAPI version 8.6.3.0 or higher.

- Fixed the logic to fetch the correct CCP facing clearing account.
- · Added a new keyword 'Status' for clearing module, which will be populated as 'PlatformStatus' keyword
- Fixed the CCPClearedDate format to 'MM-DD-yyyy'
- For FCM only, we now populate following keywords when the trade is in ALLEGED status.

CCPStatus: [ PendingCCP]

CCPOriginatingEvent: [NEW\_TRADE]

SentBy: [IA/Dealer and then will get overridden by CCP]

IncomingMessageID: [ Deal Id]



#### 2.30 Changes in 2.15.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.2.0 and ICELinkAPI version 8.6.3.0 or higher.

- Added support for Position Transfer between FCM to FCM (Kindly refer the integration guide).
- For FCM only, updated to use standard FCM work (Kindly refer the integration guide).
- Added support for configure the directory for storing debug\_xml files (Kindly refer the integration guide).

#### 2.31 Internal Release 2.15.0

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.2.0 and ICELinkAPI version 8.6.3.0 or higher.

• Internal Release < No Change for clients >.

#### 2.32 Changes in 2.14.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.2.0 and ICELinkAPI version 8.6.3.0 or higher.

- Added support for ICELinkAPI 8.6.3.0 (19 Dec 2017 Release)
- Added support for remaining Mifid II keywords [support from ICELinkAPI-8.6.0 and above].

#### 2.33 Changes in 2.13.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.2.0 and ICELink API version 8.5.1.0 or higher.

• Added support for ICELinkAPI 8.5.1.0



Added support for ProcessingOrg-Counterparty mapping for Legal Entity. Please refer to the Calypso ICE Link Integration Guide for details.

#### 2.34 Changes in 2.12.3 Release

The following changes have been made in this release. To upgrade you will need to use the jar included in the latest release jar.

• Shipping reference trade workflow 'ICELinkFCM\_Reference\_Trade.wf' for bi-directional FCM.

#### 2.35 Changes in 2.12.2 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.1.1 and ICELink API version 8.2.0 or higher.

• Added an Execute SQL schema-base changes to make it compatible with Calypso V-15.2.0.0.

#### 2.36 Changes in 2.12.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.1.1 and ICELink API version 8.2.0 or higher.

• Added an API changes to make it compatible with Calypso V-15.2.0.0.

#### 2.37 Changes in 2.12.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release minimum DTUP\_6.1.0 and ICELink API version 8.2.0 or higher.

- Added support for Netting
- Added support for Portfolio Transfer [between clients]
- Added support for int-to-long id conversion [for V-15.2.0.0 and above]



#### 2.38 Changes in 2.11.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar included in the latest release jar.

• Fixed the bug causing a shift in original date value (depending on User Default TimeZone) when the pay-load was view in Advice Document panel of Message Report.

#### 2.39 Changes in 2.11.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release and ICELink API version 8.2.0 or higher.

Added an API changes to make it compatible with ICELink API 8.2.0

#### 2.40 Changes in 2.10.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release and ICELink API version 8.1.0.

Added an API changes to make it compatible with ICELink API 8.1.0

#### 2.41 Changes in 2.9.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release (4.11.0 at the time of this release) and apply its latest Schema file and workflows. Before upgrade, please make sure all the pending ICELink message(s) are successfully processed.

• Changed the internal framework of ICE Link to use embedded FpML message in-order to support ICELinkaAPI-8 (jre-8.0), applicable for all version of Calypso.



#### 2.42 Changes in 2.8.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release (4.10.0 at the time of this release) and apply its latest Schema file and workflows.

Added ICELinkaAPI-8 (jre-8.0) changes to be compatible with only Calypso V-15.

#### 2.43 Changes in 2.7.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release (4.10.0 at the time of this release) and apply its latest Schema file and workflows.

• Added the changes to be compatible with Calypso V-15.

#### 2.44 Changes in 2.3.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar included in the latest release jar.

• Added a fix for defaulting the Quote Style and Rate in Calypso, if there are missing in the incoming ICELink message. In case they are missing, the Quote Style specified on an underlying product will be set onto the trade with rate as 0.

#### 2.45 Changes in 2.6.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release (4.0.0 at the time of this release) and ICELink API version 7.0 or higher.

Added an API changes to make it compatible with ICELink API 7.0

#### 2.46 Changes in 2.5.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar included in the latest release jar.



• Added a feature to connect ICE Link platform via a proxy. For more information please refer to the section 'ICELink Connection' in the Calypso ICE Link Integration Guide.

#### 2.47 Changes in 2.4.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release (4.0.0 at the time of this release) and apply its latest Schema file and workflows (GATEWAYMSG and UPLOADSOURCEMSG) as well.

- To improve the performance for message processing, we now added a feature to perform the upload process in the Engine side via the API instead of Data Server via the workflow rules. Workflow rules are executed in the data server thus keeping Data Server busy every time data is uploaded. Client side execution has the advantage of using the API and cache. And it can thus perform better and Data Server is free for performing other tasks. Please refer the section 'Performance and Stability Improvement' in Calypso ICE Link Integration Guide for more information
- Added a feature for uploading ICE Link csv file via Data Uploader GUI (applicable only for Format type as ICELinkCSV).
- For ICELinkCSV: Added a support for creating a BOMessage with UploadObjectStatus as 'Ignored' for deal where Status is not 'AFFIRMED' and Confirmation Status is not 'Ready'
- Removed a support for 'PlatformAvailableOperation' trade keyword.
- Added a command in ICELinkSchemaData for assigning an ID to ICELinkEngine, when running Execute SQL for the very first time.
- Included a sample workflow 'FCM\_Trade.wf' for FCM bi-directional in ICE Link distribution.

#### 2.48 Changes in 2.3.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release (3.7.0 at the time of this release) and ICELink API version 6.0 or higher.

- Added support for ISDA-2014 Definition for the following:
  - ICELink-API (both uni-directional as well as bi-directional)



- ICFI inkCSV
- Provided ability to map new ICE Link 'ISDA Transaction Type' field to Settlement Matrix in Calypso. Please see Setup Guide for more details.
- For ICELink-API, fixed a bug related to trade date-time conversion in bi-directional mode. As per this fix, the trade date-time will be converted into book time-zone before sending a trade to ICE Link.

#### 2.49 Changes in 2.2.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar included in the latest release zip. You will also need to use the latest Data Uploader release (3.5.0 at the time of this release) and apply its latest Schema file as well.

- Added support for additional timestamp keywords for ICELink-API.
  - PlatformAllegedTime
  - PlatformLastModifiedTime
- Improved the detection and handling of any errors which occur when the ICE Link Engine fails to process the deals received from ICE Link.
- For ICELinkCSV, fixed the logic for picking up the holidays and coupon frequency for CDS trades. As per this fix, in case of SNAC CDS trades, these details will be picked up from the defined CDS Settlement Matrix.

#### 2.50 Changes in 2.2.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release zip. You will also need to use the latest Data Uploader release (3.3.0.3 at the time of this release).

- Added support for importing ICE Link Custom Fields into Calypso trade keywords.
- Fixed a bug related to timezone conversion affecting the Trade Date, when a trade is booked in a different timezone from the Calypso ICE Link Engine.



#### 2.51 Changes in 2.1.2 Release

The following changes have been made in this release. To upgrade you will need to use the jar included in the latest release jar. You will also need to use the latest Data Uploader release (3.2.0 at the time of this release).

- Updated Upfront Fee logic for CDS/CDX to use Trade Date + 3 for the Bilateral trade and Cleared Date + 1 once cleared.
- Updated Start Date (Effective Date) logic for CDX to default to Trade Date + 1 as ICELink API was sending incorrect Effective Date.

#### 2.52 Changes in 2.1.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar included in the latest release jar.

- Changed format of keywords for consistency with other clearing modules:
  - CCPClearedDate (changed to MM/dd/yyyy)
  - CCPMessageTimestamp (changed to yyyy-MM-dd hh:mm:ss AM/PM)

#### 2.53 Changes in 2.1.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release (3.1.21 at the time of this release) and apply its latest Schema file as well. Please see the appropriate sections in the updated Setup document for additional details (specifically for the sql, workflow, workflow rule, and domain setup required for bidirectional functionality).

- Added the following bidirectional functionality:
  - Support for Dealer bidirectional mode (Allege, Recall)
  - Support for Client bidirectional mode (Affirm/Reject)

Including Allocating from within Calypso and sending allocations to ICE Link

- Support for Block Clearing of allocations in FCM bidirectional mode
- New keyword 'PlatformAvailableOperations'



#### 2.54 Changes in 2.1.0 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar, and remove the old keyword name 'CCPTradeld' from the tradeKeyword domain. You will also need to use the latest Data Uploader release (3.1.20 at the time of this release) and apply its latest Schema file as well. Please see the appropriate sections in the updated Setup document for additional details (specifically for the sql, workflow, and workflow rule setup required for bidirectional functionality).

- Added support for FCM bidirectional functionality (Affirm/Reject)
  - New keyword 'PlatformSubmitStatus'
- Support for leaving off '.properties' in the -config command line option
- Renamed keywords for consistency with other clearing modules:
  - CCPTradeld renamed to CCPTradelD

#### 2.55 Changes in 2.0.3 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar, and run a migration script for the renamed Legal Entity & Book attributes. You will also need to use the latest Data Uploader release (3.1.19 at the time of this release) and ICELink API version 5.8 or higher. Please see the appropriate sections in the updated Setup document for additional details.

- Added support for Allocations for FCM mode.
- Added support for Partial Clearing of allocations for Dealer, Client, and FCM modes.
  - New keyword 'AllocationClearingType' (value: Block/Partial)
- Added support for Legal Entity Parent mapping.
- Added support & setup instructions for running multiple ICE Link engines against the same Calypso environment.
- Switched to using cache for Calypso Mapping to improve performance when run as local api.
- Renamed Legal Entity attributes:



- ICE Link LE renamed to ICELinkParticipant
- ICE Link Parent LE renamed to ICELinkParent
- ICF Link Default Book renamed to ICFLinkBook
- Renamed Book attributes:
  - ICE Link Book renamed to ICELinkBook
- Bug Fixes:
  - Removed exception if optional keyword cannot be mapped to Legal Entity
  - Check for ISIN in Calypso system before mapping to Uploader XML
  - Fixed format of CCPClearedDate keyword to MM-DD-yyyy

#### 2.56 Changes in 2.0.2 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release (3.1.15 at the time of this release). Please see the appropriate sections in the updated Setup document for additional details.

- Added support for Allocations for the Client side.
- Added clearing keywords to CSV Buy-Side interface.
- Addressed several ICELink API bugs related to Client Data.
- Fixed potential infinite loop in CSV Buy-Side interface book lookup logic.
- Fixed Fee Counterparty bug in CSV Buy-Side interface.



#### 2.57 Changes in 2.0.1 Release

The following changes have been made in this release. To upgrade you will need to use the jar and Schema file included in the latest release jar. You will also need to use the latest Data Uploader release, and apply its Schema file as well. Please see the appropriate sections in the updated Setup document for additional details.

- Added support for Allocations for the Dealer side.
- Added default list of keywords to the ClearingKeywords domain.
- Renamed several keywords:
  - ICELinkAPIUser renamed to PlatformAPIUser
  - RejectCode renamed to PlatformRejectCode
  - RejectText renamed to PlatformRejectReason
  - ICELinkPartyApprovalStatus renamed to ICELinkTPApprovalStatus
  - ICELinkCtptyApprovalStatus renamed to ICELinkCPApprovalStatus