

**Pathway Certified Third Party
Products Guide
2025.04**

infor Pathway

Rights to the Contents of this Document

All rights reserved. Information contained in this document is Copyright and proprietary to Infor and may be used or disclosed only with written permission from Infor.

This document or any part thereof may not be reproduced in any way without the written permission of Infor.

Copyright © 2025 Infor

All rights reserved. The word and design marks set forth herein are trademarks and/or registered trademarks of Infor and/or related affiliates and subsidiaries. All rights reserved. All other trademarks listed herein are the property of their respective owners.

<https://www.infor.com/en-au/products/pathway>

Feedback

Your suggestions and comments regarding this documentation are highly regarded. Please contact Infor via <https://conciierge.infor.com>

Contents

Contents	3
About this Guide	5
Intended Audience	5
Overview	5
Pathway interfaces with third party products overview	5
Chapter 1: Financials	6
Financials interoperability list	6
Financials integration automation	6
Financials interfaces augmentation	7
Pathway NAR to financials (Authority)	7
Chapter 2: Assets/Work Orders	8
Assets/work orders interoperability list	8
Work orders interfaces	9
Confirm connector integration	10
ION-based integration	10
Pathway-Conquest integration	10
AssetMaster integration	10
Chapter 3: Document Management	11
Document Management Interoperability List	11
GENCON Integrations	12
Content Manager (TRIM) Integrations	12
Chapter 4: GIS	14
GIS Interoperability List	14
ESRI Interfaces and Integrations	15
Intramaps Interface	16
GoogleMaps Interface	16
Pathway-GIS Integration Layers	16
Chapter 5: Delivery Point Identifier (DPID)	17
DPID Interoperability List	17
POSTman Integration	17
QAS Integration	17
Chapter 6: Name and Address Register (NAR)	19
Chapter 7: Other Interfaces	20
Other Interfaces and Integration list	20

Chapter 8: Additional Interfaces.....	22
Pathway External Web Service.....	22
Pathway COM API	22
Generic Connector for EDMS (GENCON).....	22
Pathway Data Publisher.....	23
Pathway Dashboard Charts and In-context Charts	23
Generic External Links	24
Dynamic External Links (smart client only)	24
Infor Requirements.....	24
Pathway Partner Program.....	24

About this Guide

This guide lists third party applications for which Pathway supports interoperability. In addition, reference to the technologies underpinning the listed interoperable systems is provided on a best information available to Infor at time of publishing basis.

Intended Audience

This document is intended for users who plan to upgrade to Pathway 2025.04.

Overview

Pathway supports interoperability with third party products for these interfaces:

- Financials
- Assets/work orders
- Document management
- GIS
- Postal Service Delivery Point Identifier (DPID)
- Name and Address Register (NAR)
- Other interfaces.

NOTE: Interoperability depends on the functionality and technology of the third party products and the requirements agreed with the sponsoring Pathway sites. The implementation choices on the third party products' side may affect integration functions (and potentially, infrastructure upgrades to accommodate the associated implementation requirements).

Pathway interfaces with third party products overview

Infor recommends verifying that the new version of the third party product is certified appropriately with the Pathway version installed. Customers should contact Infor's support team to confirm the certification status of any listed integration.

Integration infers sharing or mutual invocation of functionality or immediate update of data.

Interface is the access to functionality of other system or provision of data for later update.

Infor supports the Pathway side of these interfaces. However, the respective third party software vendors should be contacted with respect to any support issues related to their products.

Chapter 1: Financials

Pathway supports importing of a chart of accounts or project codes for the purpose of validation within all its account entry screens. During the import process, you can refresh account information periodically from an external financial management product.

Pathway provides full validation of accounting entries and supports exporting all ledger transactions on a scheduled basis (usually daily). A detail-level transaction enquiry is available on transactions exported to the financial system.

NOTE: Customers define and maintain the file formats and field selections. Automation varies with product.

Financials interoperability list

This table shows the products that support interoperability with the financial interfaces:

Product	Company	Interface/Integration
CloudSuite Financials (CSF)	Infor	Integration
SunSystems	Infor	Integration
SmartStream	Infor	Interface
JD Edwards Enterprise One	Oracle	Interface
Oracle Financials	Oracle	Interface
FinanceOne	Technology One	Interface
AXS-One (Previously Computron)	AXS-One	Interface
PeopleSoft	Oracle	Interface
SAP NOTE: Generic External Links in place at Christchurch CC between Pathway and SAP – including workflow	SAP	Interface

Financials integration automation

Pathway supports BOD-enabled integration with external financials.

NOTE: BOD = Business Object Document, xml messages with standard/supported schemas.

The file based import/export options are still supported, but you can optionally replace these with automated BOD-based integrations using the Sync.ChartOfAccounts and Sync.ProjectMaster inbound BODs and outbound Process.SourceSystemJournalEntry BODs. These BODs have been tested successfully with Infor CloudSuite Financials and Supply Management. You can use these BODs with any external financial system through a middleware-based integration.

Financials interfaces augmentation

A Pathway NAR interface with purpose-built NAR role types (CEO) augments the JD Edwards Enterprise One (JDE) financial interface. The CEO role types cater for Pathway managed names stored and synchronised in JDE with specific finance-related roles such as supplier, employee, and other related purposes.

An import/export function for Accounts Receivable further augments the financial interfaces. Debtor records are validated within Receipting and receipt details are exported using fields and file formats as required by the financial management package. See Pathway BOD Mappings documentation for details of field mappings.

Pathway NAR to financials (Authority)

A one-way interface between Pathway Name and Address Register (NAR) and Civica Authority suppliers has been implemented at selected Pathway Authority sites to facilitate the mastering of name and address records in Pathway and the creation and synchronisation of those names to selected supplier records in Authority. It has been implemented in both a pull mechanism and a push mechanism.

The pull implementation makes calls to the CreateLink method of the Pathway COM API with the returned meta data being used to drive calls to the Authority API.

The push mechanism uses the Pathway Data Publisher and a user-defined name role type which is configured to auto-create a name role and the data publishing driver makes calls to the Authority API.

Chapter 2: Assets/Work Orders

Pathway includes an integrated Customer Request Management module which is used to process complaints and requests and initiate the appropriate actions through site defined workflow procedures.

You can create requests in Pathway through multiple channels including:

- Direct entry through Pathway's request maintenance
- Customer self-service entry (ePathway)
- Entry from field operations (Pathway Smart Mobile Requests and CityWatch)
- External applications invoking the CreateACRRequest method of the Pathway API or the CreateRequest and associated methods of the Pathway external web service
- External applications publishing Process.CustomerCall BODs to ION for delivery to and consumption by Pathway (assuming Pathway is the system or record for requests).

For certain classes of the customer requests created in Pathway, it can be appropriate for the customer's Asset Maintenance Management system to manage the remedial activity on associated infrastructure assets. These work requests or work orders are associated with public infrastructure such as kerbing, pavements and drainage, and other work orders. However, the customer's Asset Maintenance Management system should enable Pathway to manage the customer's ongoing engagement with the end customer; for example, managing the lifecycle of the customer request.

NOTE: when creating or updating requests through calls to the CreateRequest or UpdateRequest methods of the Pathway external web service, bear in mind that some data that is linked to a request rather than being core elements of a request – such as user-defined references, module links, tags, responses, documents, paperclip attachments – require the use of other web service methods (such as Roles methods, References methods etc) to complete the customer request object.

Assets/work orders interoperability list

These products support interoperability with the assets/work orders interfaces:

Product	Company	Interface/ Integration	Version in use by customer base and/or certified	Most recent version
Hansen7	Infor	Interface	7.7	7.7.810
Infor Public Sector (IPS) (formerly Hansen8)	Infor	Integration (through COM APIs and Pathway Data Publisher or ION) as well as CustomerCall BODs	11.2	2023.10.1*
Confirm	Brightly (owned by Seimens, rebranded Jul 2021)	Integration (through COM Confirm Connector)	6.0, 8 - 15, 15.2, 16.1, 18, 22_10c_AM	23.10
Confirm	Brightly (owned by Seimens, rebranded Jul 2021))	Integration (through web services Confirm Connector; note: requires Pathway 3.10.014 or later)	6.0, 8 - 15, 15.2, 16.1, 18, 22_10c_AM	23.10
Conquest	Conquest Solutions	Integration (multiple proposed mechanisms)	Awaiting customer confirmation for trials in Pathway 3.10.x (ION & Data Publisher/Web services options)	N/A
AssetMaster	ReadyTech (acquirer of Open Office)	Integration	6.0.18.0 and later	Unknown
AssetMaster	ReadyTech (acquirer of Open Office)	Integration (Data Publisher & web service; note: Kingborough Council only)	6.0.14	Unknown
Assetic	Assetic (owned by Seimens)	Interface	Various (from 1.6.7 – YYYY.MM.Seq) (Note: numbering change)	2023.19.1
OneCouncil EAM	Technology One	Interface (interim)	11+	N/A
OneCouncil EAM	Technology One	Integration (Data Publisher & web services)	Various	N/A

* as of October 2023 IPS has adopted Infor's new global standard for bi-annual deployments (April and October) augmented by monthly patches which incorporates the new version naming convention.

Work orders interfaces

An abstracted version of Pathway-EAM (TechnologyOne Enterprise Asset Management) requests to work orders interface has been developed and implemented at multiple sites. Pathway publishes xml to the data publishing driver which makes calls to the create work order or create work request methods of the EAM web service. The reverse direction of the integration is implemented in calls through EAM's ETL module to the UpdateRequest method of the Pathway external web service. You can use various versions of EAM or Pathway because these products do not communicate directly with one another.

In addition to a supported integration using the Pathway Data Publisher and Pathway external web services, other Pathway sites have implemented a workaround interface between Pathway CRM and Technology One's work order management system. Though not recommended nor certified formally by Infor, this workaround interface has been deployed in production environments. It uses scripts and database jobs and staging tables in the Pathway database. Note: not cloud compatible. Functionality and scope of the active Pathway Assetic interface is not known.

Confirm connector integration

When the Pathway smart client is in use, the Confirm integration is facilitated through a broker assembly known as Connector.Confirm.Wrapper.exe. This integration is required because the Confirm Connector cannot be called from inside a Windows service (such as the Pathway application server service). Pathway invokes the broker which invokes the call to the Confirm Connector on behalf of the Pathway application server service. The Confirm Connector has COM-based and web services based implementations.

ION-based integration

IPS (also known as Hansen 8) and Pathway both support the OAGIS CustomerCall noun so ION-based integration is supported out of the box, provided that the customer or Infor defines the appropriate transformations in ION.

Pathway-Conquest integration

Infor has prepared the functional specifications and an overview of technical options, which have been reviewed by the Conquest vendor (Conquest Solutions). To date, no Pathway-Conquest customer has implemented an ION-based integration although this integration is supported. Other existing options utilise the Pathway Data Publisher (outbound) and the CRM-related methods of the Pathway external web service (inbound).

AssetMaster integration

In addition to the standard integration which relies on staging tables (AMS_EXT_WKO, CIFAMNT) and purpose-built parameters and processes, Open Office has developed another integration using the Pathway Data Publisher and Pathway External Web Services on the Pathway side. As noted in the Assets/work orders interoperability list, Infor believes this integration has been deployed only at Kingborough Council (Tas).

Chapter 3: Document Management

Pathway supports creating and storing documents within its own document repository on the customer's network or within an FTP store. Alternatively, Pathway can operate in conjunction with an external Electronic Document Management System (EDMS) or Content Management System (CMS). This way, documents that Pathway generates are stored in, retrieved from, and managed through the EDMS. The appropriate links are maintained between the EDMS and Pathway to ensure that the document is retrieved and actioned within Pathway (as if the document was stored within Pathway). The retrieval and check-in/check-out process are seamless and invisible to the Pathway user.

The two-way interoperability between the Pathway and EDMS applications augments this capability. You can view the documents stored in the EDMS that are associated with a Pathway business object, for example, a Property, within Pathway from the relevant summary form.

You can store the Pathway business object's metadata referenced through a document in EDMS during registration. You can invoke the Pathway user interface and view the Pathway object from the EDMS. Additional functionality including shared NAR and automated request creation is supported for some EDMS products as is folder creation and synchronisation.

NOTE: With the general availability of the Pathway UX client (as of 3.10.016), all Pathway-EDMS integration must migrate to a GENCON-based implementation to deploy the Pathway UX client and retain EDMS integration. Pathway UX client is an html application.

Document Management Interoperability List

These products support interoperability with the document management interface:

Product	Company	Interface/ Integration	Version in use by customer base and/or certified	Most recent version	Smart client UX certified Y/N
GENCON	Infor	Integration requires external EDMS drivers	>= Pathway 3.02	1.20 (deployed in 4.00.000)	Y
ECM	Technology One	Integration requires external EDMS drivers	3.03.04, 3.04.0 3.09 (with hotfix 6), 4.02, 4.03+	4.03+	Y
Content Manager (TRIM)	MicroFocus (NOTE: TRIM-to-Pathway integration add-ons required from EDMS consultancy such as Kapish, FYB, Aten)	Integration requires external EDMS drivers	7.3+ (note: not supported by vendor) HPRM8.3 HPECM9.0-9.4 MF CM10.1	9.4 (note: requires latest patches) 10.0, 10.1 (V23.x is proposed new level)	Y
Objective	Objective Technologies	Integration requires external EDMS drivers	10.6+ (GENCON)	11	Y
PowerDocs	OpenText (ex Hummingbird)	Integration requires external EDMS drivers	(aka DM4)	No longer in use	N

DM5 (eDocs)	OpenText (ex Hummingbird)	Integration (through GENCON and Infor-authored driver)	5.3 Patch 4 16.2	16.x	Y
SharePoint	Aten Systems	Integration through GENCON	Various	N/A	Y

GENCON Integrations

Pathway UX client EDMS integration must migrate to GENCON based implementation. Pathway UX client is a HTML application.

Pathway Generic Connector (GENCON) for EDMS enables the integration between Pathway and EDMS to be abstracted such that version independence is maintained. This integration allows Pathway and/or the EDMS system to be upgraded without affecting the integration. This is due to the EDMS functionality being managed by a vendor-supplied driver written in accordance with the GENCON software development kit (SDK) documentation supplied by Infor. You can implement Pathway with any EDMS or CMS; all that is required is the EDMS/CMS vendor (or customer) to supply a driver assembly authored in accordance with the GENCON SDK documentation.

NOTE: If implemented, the EDMS to Pathway direction of the integration is achieved through the EDMS vendor or consultancy writing code to call the Pathway external web services.

NOTE: Contact your account manager to determine if a license uplift fee is payable to run GENCON functionality. This fee is not applicable for the sites migrating from TRIMCO to GENCON and their version of Pathway is 3.10.014 or later. If ECM is deployed in the TechnologyOne ECM Cloud, then a specific version of the ECM driver is required (one that is not dependent on DAS). Contact your Technology One account manager if ECM Cloud deployment is considered. Similarly, cloud deployments of TRIM (MicroFocus Content Manager in the Citadel cloud (CiX)) and Objective (in the OCL Cloud) will require specific cloud-compatible versions of their respective drivers.

You can disregard the version numbers for Objective, like the other EDMS products that are integrated through GENCON, because Pathway does not communicate directly to Objective. It is the Objective Corporation-supplied GENCON driver for Objective that provides the communication, so the real compatibility test is that associated with the driver.

NOTE: The communication is achieved through AppLink and WebTalk so on the Objective side, OCL should be consulted as to the compatibility of those platforms/applications and the Objective EDMS.

Content Manager (TRIM) Integrations

HP TRIM is previously known as HPRM, then HPERM, and most recently MicroFocus Content Manager. Following HP's rebranding of TRIM (and their TRIM-managing entity to Micro Focus), no changes are required to the Pathway side of Pathway-TRIM integration for TRIMCO based integration. However, sites can choose to upgrade their Kapish integration add-on to the .NET version known as V2.00.1028 and later (latest version is 2.05.1049). This is based from the previous TRIM integration add-on versions numbered up to and including V39. Contact Kapish Pty Ltd for further information.

NOTE: Integration with ePathway and TRIM through Kapish Webgrid has been certified at 3.10.010 and later with Webgrid V1.03 or later. In addition, the standard TRIMCO integration is replaced with a GENCON-based integration, which is a mandatory migration for sites implementing the Pathway UX client. Infor is aware GENCON drivers for TRIM are available from Kapish, FYB, and Aten Systems.

MicroFocus has advised that TRIM v9.x (up to and including 9.4) will no longer be supported from September 2022.

NOTE: As is commonplace in integrations, the functionality can continue to operate at later versions, but it is no longer supported formally.

Chapter 4: GIS

The Pathway GIS interoperability provides access to the Pathway modules direct from the GIS map and access to the GIS map direct from Pathway modules. This interoperability provides geographic visualisation of Pathway business objects, bulk processing, and affected properties processing. The interface also enables GIS driven creation of queries in Pathway and the bulk maintenance of property data.

GIS Interoperability List

These products support interoperability with the GIS interface:

Product	Company	Interface/ Integration	Version in use by customer base and/or certified	Most recent version	Smart client UX certified Y/N
ArcGIS Desktop	ESRI	Interface/Integration	8.3, 9.0 – 9.3, 10.0 – 10.6.1, 10.8, 10.8.1	10.8.1 (Enterprise) Note: ESRI to enforce migration to ArcGIS Pro	Y
ArcGIS Pro	ESRI	Integration	3.1	3.1	N (investigated but not implemented)
Autodesk Mapguide	Geomatic Technologies	Interface	5.0	Unknown	N
Dekho	ESRI Australia	Interface/Integration	4.05	No longer supported by ESRI	Y
EasiEnquirer	Brightly (formerly Precisely)	Interface	3.0	Unknown	N
EasiMaps	Brightly (formerly Precisely)	Interface	6.0	Unknown	N
Enlighten	Open Spatial (OSA – Open Spatial Australia)	Interface	4.1.5012 Note: currently dependent on IE/ActiveX	4.1.13 Note: OSA is investigating migration to UXWS (from COMGIS & ActiveX/IE)	Y
Enquiry.NET	IntegratedFM	Interface	Not in use	5.6	N
Exponare	Precisely (formerly Precisely)	Interface/Integration	5.6+	Unknown	Y
GenaMap Webbroker	Elderslie Services	Interface	7.2	Unknown	N
Geocortex Essentials	Latitude Geographics (VertiGIS) AAM Group Note: the AAM integration connector	Interface/Integration	4.14.x Note: implemented via UXWS	4.15.1 (requires ArcGIS Server 10.3+ and	N (UXWS is UX client only)

Product	Company	Interface/ Integration	Version in use by customer base and/or certified	Most recent version	Smart client UX certified Y/N
	was rewritten to use UXWS			Pathway UX)	
Geomedia Webmap	Intergraph	Interface	6.01+	Unknown	N
Intramaps	Technology One	Interface/Integration Note: requires IE for older ActiveX based integration model	9.x	Unknown	Y Note: supports UXWS model for UX
Latitude	AusSoft	Interface/Integration	7.08, 10 (not known in use)	Phoenix	Y
LocalMaps	Eagle Technologies (NZ)	Integration via UXWS SDK	Unknown	Unknown	N – applicable for UX only
MapInfo Professional	Precisely	Interface/Integration	8 – 12, 15, 15.x, 16.x 17.0.x V2019.3	V2023 Note: change in version numbering	Y
MapObjects	ESRI	Interface	2.4+	TBC	Y
GoogleMaps	Google	Integration (one way)	Multiple	Multiple	Y
UXWS					
Weave	Cohga Note: UXWS in development	Integration	2.6.4	2.6.7 (currently migrating to UXWS for UX	Y

ESRI Interfaces and Integrations

Infor is an accredited ESRI Partner. ArcGIS Pro, Portal for ArcGIS, and ArcGIS Online augment ESRI's ArcGIS desktop platform. Note: ESRI has announced the intention to migrate customers from ArcGIS Desktop to ArcGIS Pro from 10.9 onwards.

ESRI Australia has developed a new InstaLink product to replace the IsoVist IsoLink product to enable all of ESRI's web clients to be integrated with by other html/web based application software clients. Navigation interfaces from Pathway to the legacy ESRI clients (eg ArcGIS Desktop) are supported in the Pathway smart and UX clients through the generic external links function. However, this function does not equate to the standard two-way Pathway-GIS integration described in the Pathway_GIS_Functional Overview (available upon request to Infor). Development in the GIS product is required to support the full functionality of the GIS-to-Pathway direction of the standard integration...and for Pathway UX this requires adoption of the UXWS integration model.

NOTE: MapObjects is available for Java (min V2.3), ActiveX (min V2.4), and other implementations.

Intramaps Interface

The Pathway UX interface is not supported on the Internet Explorer browser. This is problematic for the Pathway-Intramaps integration as it relies on the Pathway ActiveX object to facilitate communication, which is supported only in Internet Explorer. Consequently, at 3.10.017, Infor added new functionality on the Pathway side to launch the Intramaps session from Pathway in Internet Explorer. This feature applies regardless of the supported browser the Pathway UX client is running in. Note: whilst the Pathway Agent will support the ActiveX based integration, deprecation of the Internet Explorer browser (and therefore the ActiveX object) enforces a migration to a UXWS based integration model. Both Technology One and Chartis Technology have developed UXWS-based integrations for Intramaps.

GoogleMaps Interface

GoogleMaps interface is supported for property address search in Pathway/ePathway and in Pathway's Smart Mobile. Calls to the Google API facilitate this interface.

NOTE: Due to recent changes in Infor's Google licensing status, Infor can provide a GoogleMaps license to Pathway and ePathway licensees. Contact your account manager for details.

Pathway-GIS Integration Layers

Pathway is spatially enabled at four layers:

- Property
- Parcel
- Title
- Street.

Layer Fall-through is a configurable feature within the standard Pathway-GIS integration. This feature enables the intersection points established within different layers to be parsed and encountered in different orders for different users. By default, the layer intersections are parsed in Property, Title, Parcel, and Street order. For example, a user navigates from Pathway to the GIS at the Parcel layer and there is an active intersection for the same property in Pathway at the Property layer. The intersection is always encountered and run first at the Property layer. The GIS Layer Fall-through option enables a user to change the order in which those intersections are encountered. Thus, the navigation from Pathway to GIS can happen first at the Parcel layer and not at the Property layer. The default parsing order remains in place, unless the user overrides the order through a user-specific default or within the user's session, if permitted.

You can use the Pathway generic external link feature to augment the standard Pathway-GIS integration functionality (as described in the Pathway_GIS_Functional Overview), including layer fall-through capability. This integration enables a tokenised URL format to be defined and made available in the Pathway smart and UX client interfaces through a button with user-defined label in the Options pane. This token enables additional one-way outbound GIS/mapping navigational integration to be invoked. You can take the substitution token values from the output of a SQL query or directly from any field available on the maintenance/enquiry form hosting the generic link. This ensures user-defined derivative logic can drive the contextual navigation to external GIS systems. A good example of this is the Pozi product from GroundTruth systems, implemented at a Victorian rural council.

Chapter 5: Delivery Point Identifier (DPID)

When specifying or modifying a name, Pathway enables the specified mailing address to be validated against a postal address file (paf). If matched, add the postal service Delivery Point Identifier (DPID) and barcode to the Pathway NAR record. A batch process enables you to refresh this matched data whenever the data files are updated (usually quarterly).

DPID Interoperability List

These products support interoperability with the DPID interface:

Product	Company	Interface/ Integration	Version in use by customer base and/or certified	Most recent version	Smart client UX certified Y/N
POSTman/ Rapid	DMS	Integration	Various	PAF 2023.3	Y Note: recent rearchitecting for cloud deployment. On- demand cloud service to be implemented in CY24.
Experian is the new name rest of information needs to be checked QAS (Pro Web & Batch)	Experian	Integration	Various	PAF 2023.3 Batch 6.96 ProWeb 6*	Y UX certified. On-demand cloud service to be implemented in CY24.

POSTman Integration

POSTman integration is supported for Australia. Postal Address File (PAF) is the Australia Post master delivery point list.

NOTE: Infor and DMS are currently investigating the migration of COM-based integration and the client-side integration of POSTman Rapid with Pathway, across to a cloud-based integration utilising the DMS on demand cloud service through web services. On Pathway, this would require the Pathway UX client to be operational and the Infor OS MT SaaS platform to be licensed. Updates on this research project are provided as development progresses. As an interim step, a client-side integration has been developed for Pathway UX and POSTman and this is supported on premise and in Pathway ST SaaS deployments.

QAS Integration

QAS integration is supported for Australia and New Zealand. Pro Web through web services (SOAP/XML) is supported. Earlier COM interface is not certified.

NOTE: Infor and Experian are currently investigating the migration of COM-based integration and the client-side integration of ProWeb with Pathway, across to a cloud-based integration utilising the Experian on demand cloud service through web services. On Pathway, this would require the Pathway UX client to be operational and the Infor OS MT SaaS platform to be licensed. Updates on this research project are provided as development progresses.

Integration is also planned with the Experian cloud services for mobile phone validation and email address validation.

Chapter 6: Name and Address Register (NAR)

Pathway's Name and Address Register (NAR) supports a publishing capability and an import facility to enable Pathway customers to implement true enterprise-wide name and address integration. In this integration, Pathway acts as the master (for example, system of record for names) or as a maintenance system (for example, a slave).

You can implement integration through the Pathway Data Publisher in conjunction with the Pathway API and manifest through an opt-in approach or full synchronization (aka all-in model).

In the opt-in approach, external products implement calls to these methods of the Pathway API:

- CreateLink
- MaintainLink
- DeleteLink
- DisplayLink2.

This approach decommissions the customer's own name and address creation and maintenance functions and makes use of the Pathway interface for these purposes. Updates to names performed in Pathway are published to the external system due to the UpdateForm function of the user-defined name role, which is based on the CIF2 GENCON system name role. The UpdateForm triggers a NameRoleUpdate action for each such name role type. In 3.10.006, this feature was extended to enable all-in NAR synchronisation for the CIF1 name role type associated with Pathway-TRIM integration (using the TRIMCO integration model).

In the full synchronization model, also known as all-in names integration, Pathway automatically:

- Creates name roles for every name created in Pathway
- Publishes all names to consuming applications holding an application-specific name role in Pathway for each consuming system.

You can also achieve name and address integration from an external system through the implementation of calls to selected methods of the Pathway External Web Service. The web service features more than twenty methods specific to Pathway NAR and additional methods related to the management of name roles.

For Pathway, Name and Address Register integration is supported over Intelligent Open Network (ION) using the CustomerPartyMaster and ContactMaster business object documents (BODs). This SOA-enabled integration requires separate licensing of Infor's ION product suite.

Where Pathway processes CustomerPartyMaster BODs received from ION, an option exists to automatically create Pathway debtor records. This is controlled primarily through the mappings in the (optional) CustomerAccount area of the CustomerPartyMaster BOD.

Chapter 7: Other Interfaces

Pathway supports other interfaces and integration for third party products.

Other Interfaces and Integration list

This table shows the list of supported interfaces and integration for third party products in Pathway.

Other functions		Integration/Interface	Description
Word	Microsoft	Integration - Word processing integration allows Pathway to create notices, letters, certificates, or mail merges in user defined formats. Please refer to the Certified Products document for details. NOTE: Infor recommends upgrading Word 2016 to later versions due to a potential clash with the WebDav protocol.	Pathway invokes Microsoft Word functionality through standard Microsoft COM API.
Word Processing (smart client)	Aspose	Integration - Word processing integration allows Pathway to create notices, letters, certificates, or mail merges in user defined formats using the Aspose product as the document generator.	Pathway application server uses Aspose to generate documents.
Banking data	Various	Interface - Payments are downloaded from banks and other agencies in predetermined formats for import into Pathway External Receipting using controlled and audited processes.	File interchange - Standard Pathway batch processes
Valuations	Valuers General's offices (in various states)	Interface - Valuations are provided to customers by external statutory authorities in predetermined formats for import into Pathway using controlled and audited processes.	File interchange - Standard Pathway batch processes.
External Debtors	Sharikat Khoo, various	Interface - You can import transactions generated in external debtors in predetermined formats for processing by Pathway Receipting using controlled and audited processes.	File interchange - Standard Pathway batch processes.
InfoMart	Infor	Interface - One-way interface where Pathway data is reorganised into a simplified (for example, denormalised) external database for performing end user ad hoc queries and reporting using third party tools such as Crystal Reports.	Standard build scripts recreate the InfoMart data marts on a user-defined frequency (usually overnight).
HandHeld devices	Various	Interface - Water Billing, Infringements and Inspections modules. Devices from several manufacturers and devices are supported: <ul style="list-style-type: none"> • Itron MVRs • Meteror • UDS and Radex (used for Water Meter Reading) • Windows CE Devices (used for Inspections) • AutoCite (used for auto upload of hand-held ticketing information within Pathway PPR's Infringements module). Customers in Australia and New Zealand actively use Itron devices in conjunction with import/export functions in Pathway PPR	Standard Pathway Import/Export processes. For inspections, in addition to Microsoft ActiveSync technology on the Windows CE based PDA (such as a Toshiba Pocket PC), specific Infor authored functionality is provided for operation on the PDA.

		specialized for use with Itron MVRS and Meteror.	
EFTPOS Devices	Infor/Linkly	Integration – introduced in 3.10.023 the EFTPOS device integration allows for Pathway receipting to communicate with EFTPOS devices to obviate the need for cashiers to manually transcribe amounts into the device.	NOTE: requires certification through the customer's banking provider. Please refer to the comprehensive documentation for this capability.

Chapter 8: Additional Interfaces

Pathway supports several interfaces exposed as standard features under the Pathway site license. Authorized functions control these interfaces as separately licensed components. In addition to Pathway's Infor-authored interoperability features, Pathway exposes software development kits (SDKs) that enable customers or their nominated and appropriately authorized consultants to extend Pathway's integration capabilities. For further information regarding accessing or licensing SDKs, refer to your account manager or Pathway development manager.

Customers and third parties use the available software components in Pathway's integration toolkit to build additional interfaces with third party products. See more information in Overview – Pathway and Integration – Tools and Options.

NOTE: The development of additional interfaces remains forwards-compatible, provided that these interfaces adhere to the minimum prerequisites described in the SDK documentation.

Pathway External Web Service

This Simple Object Access Protocol (SOAP) web service enables external systems to query, create, and modify Pathway data. The web service supports a comprehensive array of methods which is licensed in total or in bundles. (Note: Pathway ST SaaS licensing includes the web services). These methods are appropriate to specific functional areas such as customer request management or specific consumption use cases such as smart mobile applications. More than 80 available methods are described fully in the SDK's documentation, which is presented in a compiled help file format. Pathway external web service is published and is compatible with every Pathway major version and applicable service packs for available enhancements.

NOTE: if a customer wishes to provide the web service SDK documentation to a third party (e.g. external developer) then an MNDA would need to be executed with that party prior to the supply of the documentation.

Pathway COM API

The Pathway COM API offers more than 70 methods and is the chosen integration mechanism if external systems invoke the Pathway user interface. However, most methods that support an interactive mode of operation are invoked in non-interactive mode, provided that the calling code supplies the appropriate parameters.

The COM API facilitates most inbound integrations for GIS and EDMS and is supported for thick client and smart client users and UX users on Windows devices (through the Pathway Agent). Inbound calls to the Pathway COM API are preserved following the implementation of the Pathway UX client through the installation of Infor-supplied Pathway Agent, which brokers COM calls to the html client application (on Windows devices).

NOTE: a full description of the functions supported through the Pathway Agent is available ~~upon request~~. In the Introduction to Pathway UX document.

Generic Connector for EDMS (GENCON)

Pathway supports multiple product-specific EDMS interfaces. Many of these interfaces rely on hard-coded invocation of calls from Pathway to known methods of external systems' SDKs. This process is problematic when there are required upgrades or when an external system implements changes in their SDKs.

Infor introduces the Generic Connector for EDMS (GENCON). GENCON aims to:

- Simplify the architectural, technical, and functional specifics of an EDMS from Pathway
- Maximise the functionality and flexibility of the integration between Pathway and an EDMS.

GENCON-based EDMS integration is licensed separately. For sites migrated from a purpose-built EDMS integration to a GENCON-based integration, only a license uplift fee is payable. This is commensurate with the enhanced integration capabilities available through GENCON as compared to their original hard-coded integration.

In addition, sites that license GENCON receive access to the Pathway Data Publisher for no additional cost.

The inbound functionality of two-way, GENCON-based Pathway-EDMS integration is facilitated through:

- External system invoking calls to the appropriate methods of the Pathway COM API
- Pathway UX client that requires Pathway Agent installation.

As of 3.10SP3, Infor introduced a limited update capability to GENCON such that a GENCON driver for EDMS could update specific fields in Pathway. For instance, a new business object created in Pathway triggers a CreateFolder operation in GENCON. Then, the driver has processed the published metadata and created a matching object, which can be a folder or container in the EDMS.

This process enables the driver to update a user-defined reference in Pathway associated with the Pathway business object with the EDMS' internal folder identifier. The update capability is useful in situations where Pathway then publishes the master object's metadata to another non-EDMS external system. Pathway should know the EDMS' folder identifier to facilitate its own integration with EDMS.

NOTE: the GENCON SDK V1.20 introduces support for native EDMS web clients. This version of the SDK requires Pathway 4.00.000 as a minimum.

Pathway Data Publisher

Non-EDMS consumers can use the business object synchronisation capabilities of Pathway's GENCON integration. The Pathway Data Publisher is considered as a GENCON without the document management components because of these capabilities:

- Allows publishing of Pathway-managed business objects' metadata in xml format
- Supports name and address integration.

NOTE: Pathway NAR is considered as the master of names.

Pathway Dashboard Charts and In-context Charts

Pathway UX client provides users with a configurable dashboard. This dashboard can host graphical representations of summarised data sourced from within Pathway or external systems. When the data shown in dashboard charts is sourced from within Pathway, the collection and summary of that data are performed through user-defined Pathway queries.

The companion dashboard chart enables a site that requires data from external systems to:

- Become available in Pathway dashboard charts and drill-out
- Trigger application launch and navigation capability from chart components.

Pathway sites or authorised third parties can use the Dashboard Chart SDK to author charting drivers. These drivers facilitate communication with the external systems or databases that populate the charts and provide the optional launch and navigate functionality. The Pathway user sets the context data of the dashboard charts.

For in-context charts, the business object in the Pathway user interface sets the context of the data shown in the chart. For example, a property chart encapsulates data related to a property being viewed in a Property Summary form

Note: as of 3.10.020 and the introduction of Tags functionality, dashboard charts can also support cross-module charting using tags as a grouping option.

Generic External Links

Where an external system supports launching through a tokenised URL, Pathway enables additional interfaces to be configured using these URLs through a configurable utility that is accessible in the Pathway smart client called Generic External Links. You can define a maximum of three generic external links on any link-enabled Pathway summary form.

Dynamic External Links (smart client only)

Dynamic external links enable the content of Pathway fields to be run for additional interfacing through the smart client's View drop-down menu (as of Pathway 3.07). When selected, Pathway scans the content of the field currently in focus for various types of URLs and references in the field text including:

- Http URLs
- Ftp URLs
- Mailto URNs
- Www URLs
- Twitter style @ address
- Twitter style # reference.

If Pathway finds any matches for these links, it generates one or more dynamic links that you can select through the drop-down menu. When selected, the default web browser starts with the chosen link or mail client. Where a single dynamic link is present, you can press Ctrl + D to start the link directly instead of use the mouse to go through the View menu.

Infor Requirements

Customers and their appointed third party consultants can access the SDKs described in this chapter provided that:

- The customer is licensed for the relevant Pathway software and
- The customer's appointed third party developer/consultant to conduct the development for which the SDK is required, signs an Infor Mutual Non-Disclosure Agreement (MNDA).

There are no additional costs for access to the Pathway SDKs other than the customer's required licensing costs or for Infor's introductory advice on using the SDK. However, there can be additional costs if Infor is required to provide the third party with more detailed technical consulting. Refer to your Infor Account Manager if an MNDA is required or if a third party requires access to Infor's developers or technical consultants.

Pathway Partner Program

An important consideration with interoperability between products is the ongoing support of purpose-built interfaces. The Infor Pathway IBU supports software interfaces and integration capabilities on an ongoing basis, including data access through Infomart. These components are maintained across versions in accordance with our software maintenance agreements.

While these components of third party software that interact are not Infor's direct responsibility, we extend our commitment to assist our Pathway customers with interfaces through the establishment of the Pathway Partner Program (PPP).

This accreditation and communication program is designed to assure business continuity for the joint customer by defining communication protocols and co-operative work practices between Infor and third party vendors. The interfaces with Pathway are included within the product enhancement, testing, and upgrade processes of both Infor and partner organisations.

The non-commercial agreements between Infor and its partnership signatories for this program comprise of:

1. Memorandum of Understanding (MoU) – sets out the rules of engagement between the Infor Pathway IBU and the partner
2. Schedule 1 – Mutual Non-Disclosure Agreement (MNDA) – protects participants' intellectual property rights and commercially sensitive information
3. Schedule 2 – Specification of the integration or description of the business purpose and scope of integration
4. Schedule 3 – Nominated Contacts – designated roles in each organisation responsible for the management of communication and information exchange with the support of the Pathway Partner Program
5. Schedule 4 – Certificates – one or more documents that certify the membership of the program and the different certified products (and versions of products) for supporting the specified integration.

NOTE: These certificates are re-issued upon formal beta testing of a new version of the interface between Pathway and the partner's product.

Membership of the Pathway Partner Program is open to all vendors whose products interoperate with Pathway, including competitors. However, the program is aimed primarily at these vendors:

- With whom Infor has developed specific integration software
- For whom Pathway has been modified to support two-way integration.

There are many third party products, particularly in the spatial and financial management systems, for which Infor is not required to make any changes in Pathway. Accessing or invoking Pathway's standard outward-facing interfaces (including the SDKs) can achieve the integration functionality for these third party products. This process applies to EDMS and Data Publishing integrations facilitated through GENCON.

Customers instruct their third party vendors to provide a level of interoperability that requires the vendor only to invoke or manipulate Pathway's APIs, SDKs, or standard import/export features. Thus, from a Pathway perspective, the interface is regarded as one-sided and no formal participation in the Pathway Partner Program is required from such vendors. There is no barrier to participation from such vendors, but in such circumstances the customer does not necessarily receive any additional benefit from a formalised agreement between Infor and the third party. Customers should not be concerned if third parties utilising generic interfaces with Pathway choose not to participate in the program.