# PipeChain Release Notes 4.2.0

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# 1 USER REFERENCE MANUAL 4.2.0

# Welcome

PipeChain is a software system that automates the flow of goods between companies, in production, between production and sales within a company.

Website: www.pipechain.com

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#### **NOTICE**

Information in this document is subject to change without notice.

# 2 RELEASE NOTES 4.2.0

# **Upgrade to version 4.2.0.**

# Before upgrading to PipeChain 4.2.0

Before upgrading to PipeChain 4.2.0 from a previous version than 4.1, please follow the instructions in release notes for all previous releases of PipeChain that you need to check. See <a href="https://www.pipechain.com">www.pipechain.com</a> for earlier release notes.

# **Important Database Installation Change**

There are new default passwords for database users 'PipeChainExec' and 'PipeChainRead'. The new passwords conform to Microsoft SQL Server 2005's rules for password complexity. This will affect you if

- you are upgrading your PipeChain to 4.2.0 from an earlier version, and your database already contains a login called 'PipeChainExec'.
- your PipeChain Server uses SQL Server Authentication to connect the user 'PipeChainExec'
- you'd like to use the new PipeChainServer.properties configuration file (located in the \bin folder) that ships with version 4.2.0

If all these conditions are met, you need to check your PipeChainServer.properties configuration file, and make sure that the properties

- se.masystem.pipeline.server.dbuser
- se.masystem.pipeline.server.dbpassword

match the user that is defined in your database

# Before upgrading to PipeChain Analyzer 4.2

Please note that a detailed upgrade instruction can be found along with the upgrade SQL scripts (PIPECHAIN ANALYZER 040100 TO 040200.SQL) on the PipeChain ftp-server.

#### **Platform**

#### **New functions**

#### **Database changes**

## SQL Server 2005 notes

These notes are so important we decided to include them here even if they were a part of release notes for 4.1.

## 1. Passwords

Please note that passwords in SQL Server 2005 are case sensitive.

#### 2. Network protocols

PipeChain uses the TCP/IP network protocol for communication with the database. After installation of SQL Server 2005, you might need to enable that protocol manually.

Open SQL Server Configuration Manager

Window's Start menu

Microsoft SQL Server 2005

**Configuration Tools** 

**SQL Server Configuration Manager** 

Select Protocols for MSSQLSERVER under SQL Server 2005 Network Configuration and enable TCP/IP.

#### 3. Password complexity.

There are new default passwords for database users 'PipeChainExec' and 'PipeChainRead'. The new passwords conform to Microsoft SQL Server 2005's rules for password complexity.

#### **Improved UI for Licenses**

You can now reach the configuration dialogs for both the server and business licenses from buttons in the "Business Detail" screen. Furthermore, checkmarks on the buttons indicate if the business uses its private business license or the common server license.

You need the "Server Administrator" privilege to display the configuration dialog for the server license.

You need, at least, the "Business Administrator" privilege to display the configuration dialog for the business license.

## Improved automation when unlocking sites

Background jobs are started when a site is unlocked.

A new "Own Site" is created when "Supply" is unlocked for a site.

A new "Production Site" is created when "Flow Production" is unlocked for a site.

#### Improved search in browsers

Browsers contain large number of rows have previously been searchable by typing a single letter. That functionality has now been improved by adding an editable text field at the top of the browser window, where you can type more letters.

## **Corrections**

No Items

# Functions released in ServicePacks to previous version

No Items

# **Corrections released in ServicePacks to previous version**

#### 107004 Email Channel: To-Email-Address is now displayed right

In the MACom channel detail screen To-Email-Address wasn't shown correctly and thereby misleading the user. The error is corrected.

# Supply

#### **New functions**

## Advanced handling of shipping documents (SCA Fas 2)

Shipping doc is a new part of the product with the purpose to compare the information about what is shipped and what is received. It is also extended to what can be invoiced compared to a self billing invoice from a customer. The remittance advice from a customer is also handled.

The Dispatch Advice message is complemented with information that will indentify the dispatch advice on line level; pallets with SSCC number can also be handled. The goods reception is complemented with a similar identification and pallets as well. The messages are compared automatically, when the goods reception is finished. Discrepancies on product id, quantities, SSCC numbers, purchase order or sales order can be viewed. The discrepancies have to be confirmed. The matching features needs a specific license.

Invoices are referring to Dispatch Advice and the Self Billing Invoice is referring to a goods reception. By using the previous mentioned match the Invoice and SB Invoice can be matched automatically. Any discrepancies in amounts, currencies, product id, quantities, SSCC numbers, purchase order or sales order can be viewed. The discrepancies have to be confirmed. Remittance Advice information can be handled and the user is able to see when the invoices will be paid. The Invoice and Remittance Advice features need another specific license

#### **PipeChain GUSI Converter**

At the end of 2004 the Global Commerce Initiative (GCI), located in Cologne, Germany, initiated a new Working Group and incorporated the already-active Global Upstream Supply Initiative (GUSI). Since then GCI, together with the Working Group and GS1, has successfully designed a process model and supporting XML message standards for manufacturers of consumer product goods and suppliers of packaging, ingredients and raw materials. The aim of this model and message standards is to provide tighter integration of supply chains without the need for costly and time-consuming IT integration projects with every partner, and both the model and messages are now being implemented across multiple countries across the world by many companies.

Ever since 2006, PipeChain has supported the GUSI process model and GS1 messages. PipeChain's GUSI converter is a lightweight plug-in for the PipeChain Supply software that converts the GS1 XML messages to PipeChain XML format, allowing for integration with any system that uses the GUSI/GS1 standard.

The latest GSI version supported is version 2.3. The following messages are currently supported by the converter:

- Despatch Advice
- Goods Requirement
- Inventory Activity/Inventory Status
- Receipt Advice
- Replenishment Proposal
- Replenishment Request

To use the converter software with the PipeChain Supply software, only three simple steps are needed:

- 1. Obtain the converter plug-in and place it a directory on your server
- 2. Create a PipeChain supply channel and snap-in the plug-in.
- 3. Start the channel

Observe that no software installation process is needed. The plug-in can be made in a "hot" condition – this means that you can start using the plug-in a server without having to shut it down first.

#### Additional Reading

For more information, please refer to the PipeChain GUSI Converter documentation.

#### Create new delivery in Inbound Delivery Detail Screen

There is now a possibility to create a new delivery from the Inbound Delivery Detail Screen. The user has to be at least Site Administrator for the new button to be enabled (found in the navigator). Creating a new inbound delivery effects initial and resulting duration for the new delivery and all other deliveries. It also effects the products virtual duration. Inserting a new delivery this way is outside the normal process in PipeChain. When inserting a new delivery the user selects supplier in the supplier browser, product in the product browser and then enters "Expected Quantity", "Shipment Time" and "Receipt Time". NB the shipment time should be in the shippers' time zone. The user also has the choice to enter "Shipped" (quantity). If so the delivery will be shipped this includes setting the status to "Shipped" and effect product accordingly. If not, the delivery will be confirmed. If the user ships the delivery there is a possibility to enter "Delivery Note" either by doing so in the Order tab or in the pop-up shown at save if no deliver note has been given. Finally the user has to decide if all suggestions should be recalculated (as they might be affected by the new delivery).

## Change transport time for closed business days

PipeChain Transport List in screen Reception Schedule Detail is based on weekly transport schema. Some of these transports may be placed on none business days. In current solution a transport is cancelled if the shipping time or receipt time is on none business days (closed day). This is now changed so that shipping time and receipt time is moved to a business day according to two new parameters in screen Inbound Reception Schedule Detail. The same time as the original day when moving shipment time and receipt time is used.

New parameters:

• If Shipment Time is closed then

Cancel Transport (Default, same behavior as before)

Ship On Previous Open Day

If Receipt Time is closed then

Cancel Transport (Default, same behavior as before)

Receive on Next Open Day

Note that shipment time is never moved before current day when moving shipment time backwards. The transport will be cancelled if PipeChain can't find any open day when moving backwards.

Example: The Wed 24th, Thu 25th, and Fri 26th of December are closed days at both supplier and customer. The Customer also has closed all Saturdays and Sundays. There is a weekly transport from supplier to customer each Wednesday 13:00 receipt time is Thursday 17:00. The parameters for this

reception schedule are "Ship On Previous Open Day" and "Receive on Next Open Day". The transport times will be like this during Christmas holidays:

- Shipping time will be Tuesday 23rd 13:00 as Wednesday 24th is a none business day in the supplier calendar and the parameter for shipment time is set to "Ship On Previous Open Day"
- Receipt time will be Monday 29th 17:00 as 25th 28th are none business days and the parameter for receipt time is set to "Receive on Next Open Day"

## New field for information in Supplier Detail Screen

A new tab marked "Information" with a text field (2000 characters) has been added to the Supplier Detail Screen.

#### Possibility to see more days in web inventory chart

The inventory chart in the web client can be launched from several screens, e.g. Customer Bucket Detail. The chart shows e.g. how the duration and balance will develop during the following days. The number of days to analyze and show is decided by a default value, a property in the client property file or a number of days selected in the "Show min nbr of days" drop-down. If the user selects "30 days" or "60 days" the number of days will be a minimum the selected amount, e.g. 30 days. If the user selects "Default" the number of days shown will be the amount pointed to by the property if this exists, if not the default is 10 days. The property is either "se.masystem.pipeline.inventorychart.days" or "se.masystem.pipeline.inventorychart.weeks" where the value of the latter will be multiplied with 7 to get the number of days to show. Finally there is a button for saving the new selected value. When this is pressed the value is saved and the chart will be recalculated based on the new value.

## Possibility to change site in demand plan

The demand plan shown in tab History in the Supplier Detail Screen used to be restricted by site. All data showed in the plan related to the current site. If the user changed site the plan had to be fetched a new. Now a new browser has been introduced where the old Supplier "drop down" used to be. In this browser the user can choose any site he/ she has access to. When pressing "get plan" the data fetched will be related to the selected site. The default site selected in the browser is the current one. NB when changing site the selected product may not be available anymore, so the user has to select product again.

#### Possibility to add demand plan

The Demand Plan is shown in the History tab found in the Supplier Detail Screen. The plan is shown for the selected product. The number of plans (snapshots) to show is based on the selected date and the setting for how many plans before and after the given date to show. The setting is called "+/-plans". Now there is a possibility to add a plan by clicking the secondary mouse button (right-click) and select "Add Plan". You add a plan by selecting a date either typing it directly or by using the calendar. If there is a plan for the selected date this will be shown together with the others. This procedure can be repeated to add several plans.

## Non-scrollable key columns in demand plan

The demand plan shown in tab History in the Supplier Detail Screen has been changed to no longer scroll (horizontally) all its columns. Instead the columns containing key values, e.g. snapshot date and balance are "frozen" making it easier to compare them with data (columns) further away.

#### Generation of plans without suggestion generation

The creation of demand plans has been connected to the generation of delivery suggestions. Each time the delivery suggestion generation (DSG) ran, it was followed by a creation of demand plans. The generation of inbound delivery suggestions is configured in the Inbound Partner Agreement Screen under the tab Inbound Delivery Suggestion Parameters. If you configure DSG to run "Once a day" or "Repeated" and the day to run DSG is closed in the DSG calendar no suggestions will be generated nor any plans. This has now been changed. Creation of plans will not be effected by the DSG calendar. Instead plans will be created at least once a day if the DSG strategy is set to "Once a day" or "Repeated" (even on closed days). If no channel is mapped to the corresponding Business

Node Agreement (see tab with same name) or the channel mapped has not mapped the Delivey Forecast Report there will be only one plan per day even if the strategy is set to "Repeated".

#### **Logging of change to Partner Agreement**

When a user changes the Partner Agreement, both Inbound and Outbound, the changes are logged in message log. Added to this is a logging of who and when which is shown in the screen. This logging is found under "Last Configuration Update" in tab Business Node Agreement, Delivery Suggestion Parameters and Process Configuration. The logging is individual for each tab i.e. only when data shown in a certain tab is changed will the tab's "Changed" and "by" be updated.

## Production Requisition Resp. and Inbound Order Resp.

How PipeChain handles a production requisition response (CS72) or Inbound Order Response (PW02) has been changed according to the following: If the transaction contains order lines with products not defined in PipeChain there will be a message logged about the missing product. Then the processing will go on with the next order line. The processing will not stop as it did before. But if an order line identifies a delivery and the product in the delivery does not match the one given in the transaction the processing will stop, same behavior as before. PipeChain cannot handle product substitution via CS72 or PW02 for now.

## **Delivery Id Prefix per Partner**

The Delivery Id Prefix is found in the Own Site-screen under tab "Order". The Value is used when creating delivery identities. The identity consists of the prefix and a generated number to create uniqueness. Added to this functionality is now the possibility to set the Delivery Id Prefix per partner. This is done in the Inbound/ Outbound Partner Agreement Detail-screen under tab "Advanced". The value entered here will be used. If left blank the value in Own Site is used (default).

PipeChain version 4.0 introduced part of this functionality by using a selected property to set the Delivery Id Prefix per partner. There was no support in the user interface. This selected property is discontinued. Customers using this property should remove it and enter the value used in the relevant Partner Agreement Detail-screen instead.

If used the property was inserted into the table SelectedProperties with the PropertyValueCategory "1060". Remove all records accordingly (MSSQL) - remember to check their values first.

CHECK VALUES: SELECT \* FROM SelectedProperties WHERE PropertyValueCategory = '1060' DELETE VALUES: DELETE FROM SelectedProperties WHERE PropertyValueCategory = '1060'

#### **Corrections**

## Sending order to supplier on automatic confirmation

PipeChain supports an automated confirmation process for the suppliers. Normally all suggestions should be confirmed by the supplier, PipeChain can also confirm automatically. In some configurations the confirmed suggestions are sent in a delivery forecast, but it can also be sent out as orders (transaction PW01). Since version 2.3.1 the order has been sent on automatic confirmation after purchase order was received and since version 4.0 the order has been sent on automatic confirmation after suggestion generation. In 4.2 the order is sent on automatic confirmation after manual request of the order. The transaction is only sent if the transaction is mapped on one of the channels connected to the inbound partner agreement for the supplier on the site of the order.

#### Error in automatic receipt of inbound deliveries columns

Automatic receipt is a function executed on balance increase if receiving advice is not expected from a customer or for a supplier. It's configured in the partner agreement screen if receiving advice is expected or not.

When own balance was increased with the inventory report transaction and there was a confirmed delivery to be received the own balance was adjusted correctly to the new balance, but the supplier partial balance was instead increased with the received quantity and not updated with the new balance. So every time a delivery was automatically received the supplier saw a too high balance on the web. Also if the balance was manually updated in Own Bucket Detail the supplier partial balance got incorrect. But in the latter case the partial balance was set to the new balance plus the received quantity.

This is now corrected so the partial balance is first increased with the received quantity and then decreased with the consumption (the difference between the received quantity and the difference between the new and old balance). If there are more than one supplier the consumption is split according the shares, min and max.

# Functions released in ServicePacks to previous version

#### 107007 New fields in email sent when confirming a delivery

The Email sent to customer when confirming a delivery (CS02), in this version shows the new shipment and reception times.

## 107008 New background job to send CS37/CS50

There is a new background job called Scheduled Delivery Forecast Sender to send CS37/CS50 according to calendar repeatedly.

To control which days the transaction is sent create a calendar called "Scheduled Delivery Forecast Sender" and close days the transaction is not to be sent.

# Corrections released in ServicePacks to previous version

No items

#### WebAccess

#### **New functions**

No items

#### **Corrections**

# **Confirm Suggestions in Outbound Order detail**

The Confirm Suggestions button was not disabled if the order already was confirmed. In order to be consequent with the OK and Cancel buttons in the dialog that were disabled if the order was confirmed the Confirm Suggestions button is now enabled only if the order isn't confirmed and the user has at least operative privileges in the order screen.

# Functions released in ServicePacks to previous version

No items

# Corrections released in ServicePacks to previous version

#### 107098 Unable to ship partly received delivery

If a supplier (with WebAccess) ships parts of a delivery and leaves rest of it to ship later on, it's not possible to ship the rest of it if the first part is received and the delivery has status Partially Received. The error is corrected.

# WebShop

## **New functions**

No items

## **Corrections**

No items

# Functions released in ServicePacks to previous version

**107042** CodeBundle item Changeability added The file CodeBundle.properties contains text that can be translated by the customer.

Some new translatable items (for delivery status in the WebShop) have been added. se.masystem.pipeline.bo.Changeability.Changeable = Changeable se.masystem.pipeline.bo.Changeability.Changeable\_in\_time = Changeable in time se.masystem.pipeline.bo.Changeability.Unchangeable = Unchangeable

#### 107006 Price Range is made hideable in the overview screens

Price Range is made hide able in the overview screen in the webshop.

# Corrections released in ServicePacks to previous version

#### 107009 Error in Basket screen

An error in the basket in the webshop caused problems. The error is corrected.

#### 107005 Email sent on basket confirmation

Email is now always sent to both user and partner agreement contact on basket confirmation.

# **Analyzer**

# **New functions**

No items

#### **Corrections**

No items

## Functions released in ServicePacks to previous version

## 107099 One more property for FlowPeriodWeek

The complex SQL used by the Analyzer Poll background job for the FlowPeriodWeek data has proved to be fatally dependent of the JOIN order. The job is run the night before each Monday. The default join order seems to work fine for most customers, but in some cases (large flowmodels) it does not. In these cases one of two bad things may happen:

- most probably the tempdb becomes full. No data is saved for FlowPeriodWeek, but execution goes back to normal after a few minutes.
- or the job execution takes extremely long time (many hours), using a lot of CPU. This situation may require a server restart

The FlowPeriodWeek data can be turned off using the property se.masystem.pipeline.server.disableFlowPeriodWeek = true

Now it is also possible to try an alternative join order using the property

se.masystem.pipeline.server.FlowPeriodWeekJoin2 = true

This should be regarded as a temporary workaround. The long term solution is a rewrite of the FlowPeriodWeek code.

#### 107079 Property for disabling FlowPeriodWeek added

A property was added so that FlowPeriodWeek execution can be disabled.

It is deployed by adding the below line to the PipeChainServer.properties file, which is located in the PipeChain installation's bin-folder.

se.masystem.pipeline.server.disableFlowPeriodWeek = true

## 107041 Conditional execution of FlowPeriodDay

Due to performance problem regarding writing to the Analyzer database, the "heaviest" part, FlowPeriodDay, was made conditional.

By adding the line

se.masystem.pipeline.server.disableFlowPeriodDay = true

to the PipeChainServer's property file, writing to the FactFlowPeriodDay table is disabled.

#### 107014 Added logging for Cube Processing Trigger

Due to problems with the Cube Processing trigger, additional logging was added. This logging requires that "debug" level logging is set on the PipeChain server

#### 107013 Logic for "Empty" changed in inventory cube.

In PipeChain Supply, there has always been logic that explicitly sets the Duration Meter to "Green" if the balance is zero AND the outflow is zero.

In analyzer, the Supply value above is saved along with an "Empty" value. This value did not have the above logic, and thus it was possible to get a higher number of "Empty" than "Red".

The same logic is now applied to "Empty". When the database is updated to 4.1.0, old record with zero outflow is changed from "Empty" to "OK".

## 107011 History tables saved by PipeChain server

PipeChain Analyzer 4.1.0 is mainly a complete platform change. The new features of PipeChain Analyzer version 4.1.0 are:

- 1 SQL Server 2005 support (SQL Server 2000 is still supported)
- 2 The history data movement is integrated into the PipeChain server. This significantly reduces PipeChain Analyzer installation and upgrade work.
- 3 History data is moved "per Site", i e can be moved at the most suitable time for the site.
- 4 The internal order of the different history data tables are fixed, i e can not be erroneous.
- 5 Automatic management of WHEN data is moved, e g weekly data.
- 6 The Product Group and Biznode Group data in PipeChain Supply is reused in Pipechain Analyzer.

The old Excel-sheets for PipeChain Analyzer is no longer used (though the ProductStandardCost Excel-sheet remains).

More release and installation details are found on our ftp-site, under pub/PipeChain/4.1.0/Analyzer/

# Corrections released in ServicePacks to previous version

#### 107039 Lack of calendars could cause null-pointer exception

If calendars for e g own reception, own shipping, supplier shipping or customer reception are not explicitly created, a default calendar is used.

When PipeChain Analyzer searched for calendars, it did not find the default calendar (because it has Business Key = 0). Thus, if no other calendar was found, a null-pointer exception would be thrown when saving historic data for deliveries or flow models. The error was corrected.

# **Load Planner**

## **New functions**

No items

#### **Corrections**

No items

# Functions released in ServicePacks to previous version

No items

# Corrections released in ServicePacks to previous version

## 107010 No increasing of lines quantities

When a shipment has a fill rate lower than 100% the user has the possibility to increase the line quantities automatically with the Adjust Suggestions button. But even if a shipment has a fillrate lower than 100% and the suggestions is at the min qty level the suggestions aren't adjusted. The error is corrected.