



PECOS P2P Version 18.0

Release Notes November 2022

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1 Introduction

Elcom is pleased to announce the release of PECOS P2P version 18.0.

Version 18.0 is a major release which delivers several technical enhancements, feature changes, an updated user interface, and several defect fixes.

As many of the enhancements in this release are technical in nature, customers are advised to thoroughly regression test the build against their specific use cases for both administration and procurement roles and functionality. This should include new data setup, edits, and all end-to-end transaction processing functions.

1.1 Audience

These release notes are for customers upgrading from PECOS P2P version 17.0 to PECOS P2P version 18.0 and should be read in conjunction with the appropriate administration and user manuals.

1.2 Enhancement and Feature Listing

The table below lists the enhancements and features in this release and the sections within this document where further information is provided.

| Enhancement / Feature Change Description | Document Section |
|--|------------------|
| Technical Refresh | 2.1 |
| Batch Requisition – New Option for Validation | 2.2 |
| SSO Capability | 3 |
| Configurable Mail Template for Document Transmission | 4 |
| 2 Factor Authentication for Login | 5 |
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| Defect Repairs | 7 |

1.3 Platform Support

PECOS v18.0 is certified for use with PCs with several browsers. More information can be obtained in the PECOS Supported Technology Guide.

1.4 Overview

For new features introduced with PECOS P2P version 18.0, these release notes include a **Purpose** section containing a brief description of the new feature, **Usage Scenarios** and relevant **Exclusions** where appropriate. **Document References** to current versions of Guides and Manuals are given where further, more detailed information is available. A **Functional Enhancements Overview** of the new feature is provided, and **Use Cases** are described in detail.

1.5 Testing This Release

Elcom utilises Agile development processes to create software through iterations. Each iteration involves a team working through a complete software development cycle, including planning, requirements analysis, design, coding, unit testing and acceptance testing by business stakeholders. Testing in this process focuses on ongoing testing against newly developed code until quality software results are achieved. This is overseen by dedicated Elcom Quality Assurance resources involved in planning and executing tests and reporting results. These dedicated Quality Assurance resources develop and execute a written test plan for each area of newly developed code and include supplemental test cases for Functional Unit Test cases, Regression Test cases, Browser specific test cases, Integration Test cases (for imports and exports used in integration), basic Volume Test cases and Security Test cases.

Elcom confirms that this new software release has been tested according to the above and warrants under the terms of our software licence agreement that upon delivery of this new release, our software is:

- Free from viruses, worms, trojan horses, cancelbots, and any codes or instructions that could be used to access, modify, delete, corrupt, deteriorate, alter, or damage any data files or other computer program used by the customer; and

- Free of locking mechanisms or other disabling or destructive devices or mechanisms which might be activated at any time; and
- For a period of three months after formal acceptance of this release, the software is free from material defects in design, materials, and workmanship.

2 Enhancements and Changes

The following section details the technical and minor functional changes included in this release.

2.1 Technical Refresh

2.1.1 Background

PECOS P2P version 18.0 introduces several technical upgrades in this release to conform to the changing standards in the regulation of web content and to increase the flexibility of PECOS software while keeping abreast and utilising the advantages of the latest technological developments.

Elcom's continual evolution of PECOS has made these upgrades possible to ensure that it continues to meet the requirements of every customer. As a matter of course, this process includes upgrades to all the underlying, third-party software components and technologies of PECOS to ensure compatibility with the latest web technologies.

The technical refresh was initiated during the previous release of PECOS. Since then, it has been continued and expanded with further upgrades to the latest version of Java and the replacement of older technologies in Transport Layer Security, adding support for the most current versions. PECOS is now faster and more dependable through increases in memory capacity and steps to bring greater uniformity to the technology stack through further use of Java and the removal of older Microsoft technological dependencies.

This release incorporates enhancements to the user experience, bringing uniformity to the User Interface (UI) across the suite of Elcom solutions through design elements from Google's Material UI and ensuring conformity with the latest Web Content Accessibility Guidelines specifications.

2.1.2 Description

The following technical enhancements have been introduced in this release:

- PECOS now operates as a fully independent 64-bit Java application on Microsoft, allowing it to support vastly increased memory heap sizes for optimal performance.
- PECOS no longer depends on an embedded MS DLL for its workflow service, as the 64-bit Java engine now replaces the DLLs in the workflow stack. This server is managed by an HAProxy Enterprise (HAPEE) load-balancer. This allows the service to provide improved maintainability, adaptability and increased security while remaining efficient in high-volume traffic.
- PECOS now benefits from an upgrade to Java 17 and Tomcat 9, taking full advantage of the latest features in upgrades to the Java language and Tomcat environment in which our Java-based applications run.
- The attachment handler is now configurable with a maximum allowable payload to prevent the inclusion of excessively large attachment payloads, which may cause issues with order transmission. The setting for the maximum allowed size of attachments per transaction is 20MB. If a user attempts to upload 1 or more attachments on a transaction with a cumulative size greater than 20MB, the user will be presented with an error message and the attachments will not be uploaded and saved.
- A refreshed UI, in line with the Material IO from Google common theme, has been applied to this release alongside the wider suite of Elcom solutions for a high-quality UI/UX experience involving visual cues and better usability without a major rework of screens or flows. This has been implemented with a card-based UI and floating labels on inputs for a more visually comprehensible UI in which different aspects of functionality are distinctly and clearly highlighted.
- PECOS 18.0 UI ensures WCAG 2.1 AA compliance.

2.2 Batch Requisition – New Option for Validation

2.2.1 Background

In prior releases of PECOS, if non-catalogue items are not allowed at the batch user level, the batch requisition process rejects an entire requisition from loading to PECOS if any one item on the requisition is not found as an active item in a PECOS catalogue.

Some customers have requested that in this scenario, the requisition is created in PECOS for the items that are found as active in a PECOS catalogue, and skips the addition of any items that are inactive, expired, or do not exist in a PECOS catalogue.

2.2.2 Description

Through the use of a new post URL for batch requisition import, the logic described above will be applied. That is, when setting 'non-catalogue' items to 'not allowed' the requisition is created in PECOS for the items that are found as active in a PECOS catalogue, and skips the addition of any items that are inactive, expired, or do not exist in a PECOS catalogue.

More information can be found in the PECOS Batch Requisition Import Guide.

3 Single Sign On (SSO) Capability

3.1 Purpose

SSO governs access to entire workplace tool suites and allows the ability to work with various software services using a single sign-on, for example, in Microsoft Active Directory.

Due to requirements posed by many Elcom clients for the implementation of PECOS into an SSO facility, PECOS 18.0 provides the technical foundation to allow PECOS to be incorporated into an environment where a single sign-on service using external third-party software is implemented.

This addition increases the adaptability of PECOS in broader office software contexts and ensures that our software remains current in its technological feature offering.

3.2 Usage Scenarios

A buying organisation has implemented a single sign-on functionality to encompass such systems as HR/Payroll, Finance, Housing Management, etc. and wish to include PECOS within the programme. The customer can request a bespoke implementation of PECOS into the existing single sign-on environment using the Elcom Service Request process to achieve this.

3.3 Functional Enhancement Overview

Spring Security has now been incorporated into PECOS, providing the capability to adapt to different customer requirements through its flexibility and extensibility. Utilising the Spring Framework Ecosystem allows PECOS to easily adapt to whichever authorisation standard the client's software is implementing, including SAML and OAuth2.0.

Projects to implement PECOS into a client's existing SSO environment can be initiated as a billable professional service through the Elcom Service Request process.

4 Configurable Email Template for Document Transmission

4.1 Purpose

Due to popular demand, the ability to configure the content of the Email subject and body for Email transmission of order documents has been added to PECOS. This is configured at the organisation level and will be applied in cases where Email transmission of order documents is selected on supplier profiles.

4.2 Usage Scenarios

A customer has specific information that they wish to relay to suppliers when sending purchase orders via Email, which may be custom to their organisation and not already included in the content provided in the PECOS standard Email text.

4.3 Document References

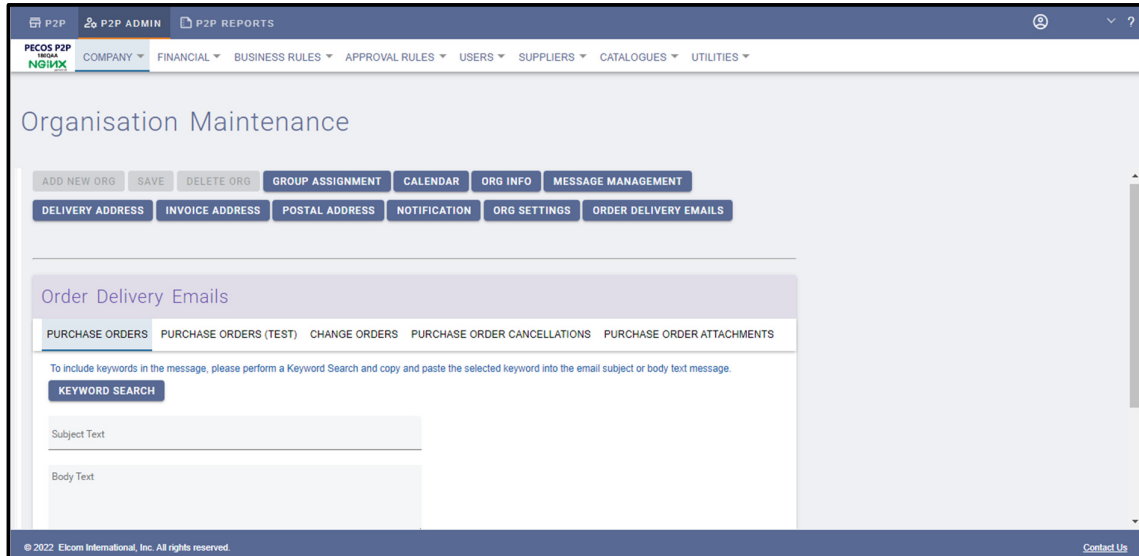
PECOS Version 18.0 PECOS Admin Manual

4.4 Functional Enhancement Overview

A new administrative option has been added to the tab:

PECOS -> ADMIN -> COMPANY -> ORGANISATION MAINTENANCE -> ORDER DELIVERY EMAILS.

The Email template configuration is available for five order document transmission types. The template closely resembles the one used for configuring Email content in workflow. A Keyword search is also available, and can be used to construct the content.



Organisation Maintenance screen with Order Delivery option added to the end of tabs

4.5 Use Cases

Description:

Configurable Email Template for Document Transmission

Prerequisites:

- The user has Administration rights for Organisation Maintenance at Level 1 or Level 2
- A supplier has been configured with an accessible Email address to allow the user to view the output
- If applicable, ensure Purchase Order Change/Cancellation Contact in the Contacts section of the supplier profile also has an accessible Email address

Steps:

- User logs into PECOS and navigates to P2PAdmin -> Company -> Organisation Maintenance -> Order Delivery Emails
- Create a Subject and Body text for Purchase Orders, Change Orders, Purchase Order Cancellations and Purchase Order Attachments (if applicable) and save. Keywords are available for use and should be included in the test
- Navigate to P2P and create and submit a requisition using the preconfigured supplier
- Perform any required approval and allow the PO to transmit
- User can create a change PO or cancellation where applicable

Expected behaviour:

An Email is received containing the configured subject and body text

5 2 Factor Authentication for Login

5.1 Purpose

Elcom customers have expressed a need for the capability to set 2 Factor Authentication for user login to PECOS for added security.

5.2 Usage Scenarios

A customer's IT policy dictates that all business applications provide 2 Factor Authentication.

5.3 Document References

PECOS Version 18.0 System Administration Guide

5.4 Functional Enhancement Overview

A new dynamic option, 'Enable 2 Factor Authentication,' allowing an administrator to set up 2 Factor Authentication, has been introduced and can be set at a Company Level or User Level. When set to True, 2 Factor is enabled at the desired level. The administrator can also set the length (4-10) and expiration in minutes (5-10) of the verification code.

Dynamic Option settings applied at the User Level always override the Company Level settings.

When set, this will present the user attempting to log in with a field to enter a code. The user will receive a system-generated code based on the Email address configured on the user profile and entering this code in the field will allow for login.



5.5 Use Cases

Description:

2 Factor Authentication

Prerequisites:

- a) The user has Administration rights for Dynamic Options and User Profile
- b) The user profile is configured with the appropriate Email address

Steps:

1. Log in to PECOS as an Administrator and navigate to P2P Admin -> Dynamic Options
2. Locate the Dynamic Option 'Enable Two-Step Verification' and set it to true
3. Enter a desired length and expiration
4. Log out of PECOS and attempt to log in
5. Where appropriate, further tests should include allowing the verification code to expire, in line with the configuration of the Dynamic Option

Expected behaviour:

The user receives an Email containing the verification code and, when entered in the appropriate field, allows the user to log in.

6 Configurable Non-Catalogue Page – Dynamic Option

6.1 Purpose

It is now possible to remove the presentation of a number of fields that have been identified as optional and not widely used from the non-catalogue item order page. These fields are GTIN, Mfr Part Number, Manufacturer, UOM Quantity, UOM Quantity Unit, Hazard Code, Control Regulation, Lead Time (Days), Internal Comments, External Comments, Category Code fields.

6.2 Usage Scenarios

An organisation has determined that the fields listed above are not required so will never be utilised by their requisitioners, therefore the removal will simplify the process and improve the user experience.

6.3 Document References

PECOS Version 18.0 System Administration Guide

6.4 Functional Enhancements Overview

This release introduces a new dynamic option, 'Exclude Unwanted Non-Cat Fields', at the company level on the administration module that will allow an administrator to control the availability of specific input fields for requisitioners on the Non-Catalogue Page. The input fields that will become unavailable when this dynamic option is selected are GTIN, Mfr Part Number, Manufacturer, UOM Quantity, UOM Quantity Unit, Hazard Code, Control Regulation, Lead Time (Days), Internal Comments, External Comments, Category Code fields.

Note: This newly introduced Dynamic Option should not be selected when the Dynamic Option of Require Category Assignment for Non-catalogue Items is set to True, due to the removal of the Category Code fields.

6.5 Use Cases

Description:

Configurable Non-Catalogue Page

Prerequisites:

- a) The user has Administration rights for Dynamic Options
- b) The user has access to the Non-Catalogue Item Entry page

Steps:

1. Log into PECOS and navigate to Basket -> Add Non-Catalogue Item and review the page
2. Navigate to P2P Admin -> Dynamic Options
3. Find and select the Dynamic Option 'Exclude Unwanted Non-Cat Items' and set it to True
4. Log out of PECOS and log back in
5. Navigate to Basket -> Add Non-Catalogue Item

Expected Behaviour:

The non-catalogue page appears with the unwanted fields removed

7 Defect Repairs

The table below shows the defects repaired in release 18.0 by defect ID and area. Also provided are scenarios that can be replicated to confirm the correction of the defect.

7.1 Pre-Requisites

To replicate and perform validation of the scenarios, you must have access to a PECOS P2P site deployed with version 18.0, a user ID and password allowing access to the appropriate areas of the application and a detailed knowledge of PECOS P2P administration (some scenarios may require additional set up or configuration). If you do not, please see your PECOS system administrator.

7.2 Defect Listing

| SQA No. | Description | Area and Function |
|----------------------|---|--------------------------|
| PIN-25/ (P1IIN-5) | Electronic invoice: VAT on invoice different than VAT on PO leads to VAT tolerance error in cases where it is within tolerance | Invoice and Settlement |
| 18523 (P1IIN-25) | Document User Fields -- Fixed Values are lost when the approver updates during REQ approvals | Requisition and Ordering |
| 18564 (P1IIN-7) | Leading/Trailing spaces are not trimmed when included in updates to FT description (acct_segment_Value) – this has a downstream negative impact on the order line financial tracking export | Requisition and Ordering |
| PIN-39 (P1IIN-4) | There are observed cases where orders remain in 'Order in process' status on completion of requisition approval (i.e., after 'Requisition released for ordering') | Requisition and Ordering |

| | | |
|----------------------|--|---|
| PIN-40 (P1IIN-17) | Requisition Plan setup – The keyword list includes keywords that are not applicable and are not functional and should not be presented/used | Approval Plans |
| PIN-41 (P1IIN-18) | Requisition Plan setup – some keywords are not functional and should be as they are valid options | Approval Plans |
| P1N-337 (P1IIN-8) | Enforcement of password rules. Issues were picked up with older versions not properly enforcing alphanumeric restrictions. Users were permitted to set passwords containing only alphabetic characters. A fix has been applied to ensure the alphanumeric requirement is enforced. | Organisation Maintenance/Password Control |

7.3 Use Case Scenarios

Below are use case scenarios for the defects listed in the above table.

7.3.1 Defect PIN-25/ (P1IIN-5)

Defect Description:

Electronic invoice: VAT on invoices different than VAT on PO leads to VAT tolerance error in cases where it is within tolerance.

When loading an electronic invoice, the loader picks up VAT from PO and computes calculated amounts. These are different from the amounts on the invoice – leading to VAT tolerance error.

Pre-requisites:

- a) The testing user has necessary rights in PECOS to carry out activities from creation to transmission of orders to suppliers, each set up with the various transmission options available from PECOS, as well as invoicing and settlement rights
- b) An invoice PDF is available containing a specific VAT type

Steps:

1. Log into PECOS and create a requisition, replicating the invoice but containing a different VAT type and submit
2. Perform required approvals and wait for PO to transmit
3. Once transmitted, create a full receipt
4. Allow the PDF to be processed by the e-Invoicing solution and Run Matching to complete
5. Review the Settlement page

Expected Behaviour:

The Invoice will reconcile with no VAT tolerance errors

7.3.2 Defect 18523 (P1IIN-25)

Defect Description:

Document User Fields (DUFs) -- Fixed value assignment of document user field value is lost if approver updates user field(s) during requisition approval. The issue is most prominent when 2 or more L3 orgs share similar DUFs

Pre-requisites:

- a) 2 L3 orgs have Document User fields set at relevant L3
- b) Both DUFs have the same name and same key and are visible in Procurement
- c) Both DUFs have differing default fixed values
- d) User has Requisition rights and approval rights

Steps:

1. Log in to PECOS as the 1st L3 user and create a requisition and submit
2. Perform any required approvals and wait for transmission

3. Go to View PO and observe DUF value in Additional order information
4. Log into PECOS as 2nd L3 user and create a requisition and submit
5. Perform any required approvals and wait for transmission
6. Go to View PO and observe DUF value in Additional order information

Expected Behaviour:

Previously, the 2nd order would show the value from the 1st L3 org DUF. We now see both DUFs displaying correct fixed value

7.3.3 Defect 18564 (P1IIN-7)

Defect Description:

Leading/Trailing spaces are not trimmed when included in updates to FT description – this has a downstream negative impact on the order line financial tracking export

Pre-requisites:

- a) User has Administration rights for Financial Tracking
- b) User has report access

Steps:

1. Log into PECOS and navigate to P2P Admin -> Financial -> Financial Tracking Maintenance
2. Select method. Select segment and choose 'Add new value'
3. Add a new value and description, ensuring the description has a trailing space
4. Save and observe value description

Expected Behaviour:

Space has been removed from the description

7.3.4 Defect PIN-39 (P1IIN-4)

Defect Description:

There have been intermittent cases observed where orders remain in 'Order in process' status when they have appeared to complete approval. The introduction of a new workflow service in PECOS 18.0 has increased the duration allowed for workflow to complete, thus preventing this scenario as assessments indicated that this situation was occurring due to failures in completion of the workflow.

Pre-requisites:

- a) User has requisitioning rights

Steps:

1. Log into PECOS and create and submit a requisition
2. Perform all necessary approvals

Expected Behaviour:

Order Status does not show Order in Process

7.3.5 Defect PIN-40 (P1IIN-17) & Defect PIN-41 (P1IIN-18)

Defect Description:

Defect PIN-40 (P1IIN-17) Requisition Plan setup – Several keywords have been found to be either non applicable and/or non-functional and are not in use. These have been removed and are listed below.

%@UserDocumentField::OverBudgetAmount%
%@UserDocumentField::OverBudgetCode%
%@UserDocumentField::OverBudgetPercent%

%@SupplierGLN%
%@SupplierNumber%
%@ExternalOrderID%

Note: The following have also been removed from Order Plan setup.

%@UserDocumentField::OverBudgetAmount%
%@UserDocumentField::OverBudgetCode%
%@UserDocumentField::OverBudgetPercent%

Defect PIN-41 (P1IIN-18) Requisition Plan setup – 2 keywords are not functional. These have been repaired and are listed below.

%@ProcurementCard%
%@ReqID%

Pre-requisites:

- a) User has Administration rights to Approval plans
- b) User has visibility of existing Approval plan keywords

Steps:

1. Log into PECOS and navigate to P2P Admin -> Approval Rules -> Approval Plans
2. Select or create a new requisition approval plan
3. Observe available keywords in Email and audit trail messages
4. Use the keywords that were not functioning prior to a plan email as applicable

Expected Behaviour:

Keywords which are not applicable are no longer available. Keywords which were not functioning prior are functioning as applicable.

7.3.6 Defect P1N-337 (P1IIN-8)

Defect Description:

Enforcement of password rules. Issues were picked up with older versions not properly enforcing alphanumeric restrictions. Users were permitted to set passwords containing only alphabetic characters. A fix has been applied to ensure the alphanumeric requirement is enforced.

Pre-requisites:

- a) Password Rules in Company Settings are set to 'Enforce use of Numbers and Letters' 'Yes'

Steps:

1. Login to PECOS
2. Go to the top right corner and hover over the username. This displays a pop-up that has a link to 'Change Password'
3. Click on the link, that will lead to the 'Change Your Password' page.
4. 'Password Information' box says - Your password must contain numbers and letters (which is consistent with the configured password rules)
5. Enter current password
6. Enter a new password that contains only letters.
7. Re-enter new password and submit

Expected Behaviour:

Validation fails on a new password with the message 'Please choose a new password that contains both numbers and letters.'