

Maximizing Maximo: Advanced Configuration Techniques

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Agenda

Quick introduction

Permit Notification: A Brief Overview

Maximo: Leveraging Existing Maximo Features and Configurations

Results

Who we are



Darlene Polanco

Technical Business Support Analyst



Constance McNamara

Senior Technical Business Support Analyst

What we do / Ways in which we support



- Troubleshooting
- Consultation



- Business Relationships
- Maximo expertise



- Customer Focus
- Provide low-cost solutions

Permit Notification: A Brief Overview



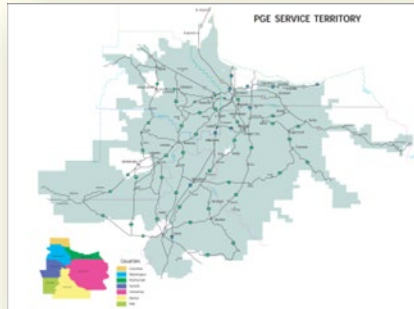
Permit Notification: A Brief Overview

Permit Notification

Goal:

Work effectively with municipalities and navigate the complex permitting process

Improve PGE efficiency, reduce human error and allow PGE staff to focus on more strategic tasks rather than routine administrative work.



Work Permits

Each municipality has unique processes and requirements, so it's essential to approach each government with flexibility and a willingness to adapt to local needs.

- Each Municipality requires an email notifying them of PGE work happening in their jurisdiction.
- Each Municipality dictates how many business days before construction the notification should go out.
- The email must contain: a list of work orders, organized by the assignment date in descending order, Crew number, Job Plan Description, Address, and Permit number.
- PGE Maximo users need the flexibility to assign different communication templates, because Municipalities require different verbiage in the email depending on the permit type.

PGE currently serves 60 different municipalities

Maximizing Maximo: Permit Notification Automation



Employee Friction

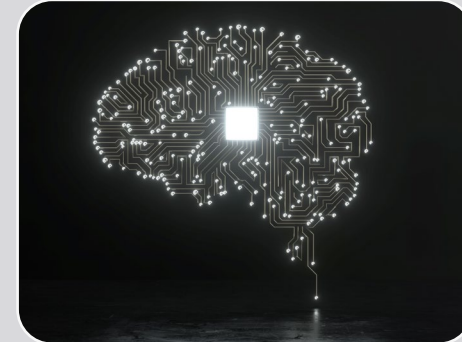
1300 hours spent annually sending email notifications



Create a Permit Portal Using a Vendor

Estimate 1500 hours development work to create a portal

Portal did not meet **all** of the Municipality requirements

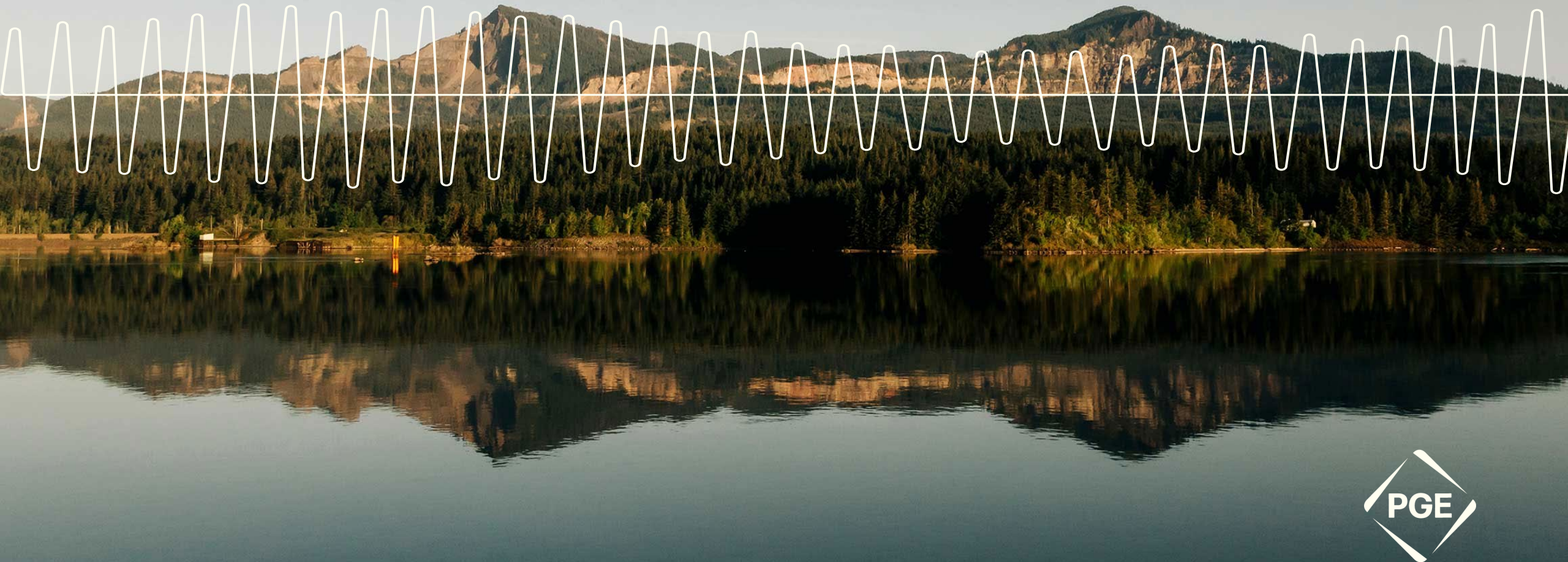


Why Not Maximo?~

Pratibha Devan BSA

In 2021 we began exploring how we could use existing Maximo functionality that would reduce costs and provide a solution to our Municipalities

Maximo: Leveraging Existing Features and Configurations



Automation Scripts

We created two scripts designed to execute a series of commands, reducing manual effort and increasing efficiency.

Maximo automation scripts contain the conditions, frequency, and actions that Maximo uses to: gather the list of work orders, email the list to the municipalities, and add a log note to the work order.

The script leverages: the Maximo general value list, prerequisite subtypes, domain values, task setup and communication templates.



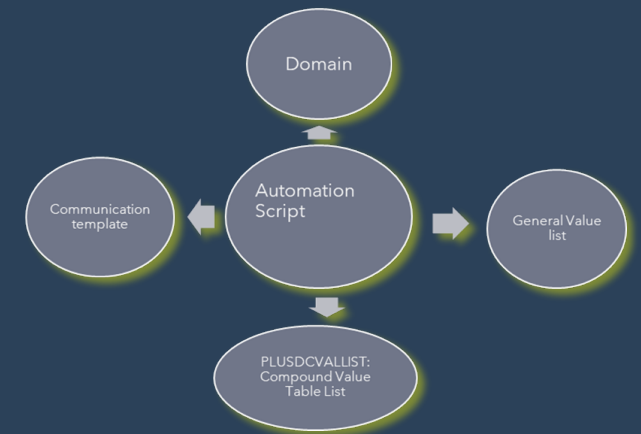
Send email notification to municipalities for pre and post construction work



Change task status to "COMP"



Create a log note on the work order documenting a notification has gone out



Maximo Configuration: Pre-Construction Notification

The automation scripts look for work orders with prerequisites containing the combination of prerequisite type: **PERMITPRE** with a subtype value referencing the municipality.

The work order must also contain prerequisites with the prerequisite type **PERMITREG** or **PERMITSPC** with a subtype value referencing the **municipality**.

All three prerequisites must be assigned the same prerequisite Subtype

Prerequisite: 343 City of Gresham Pre-Con Notify	Predecessors: M2477
Prerequisite Type: PERMITPRE	Milestone: RCLOSE
Prereq Sub Type: GRESHAM	Successors: 750

Prerequisite: 340 City of Gresham permit	Predecessors:
Prerequisite Type: PERMITREG	Milestone: RDISP
Prereq Sub Type: GRESHAM	Successors: 690,750

ALN Domain

Domain: PGEPERMITPRE Permit Pre-Construction Notification

Data Type: UPPER

Length: 16

Value	Description	Organization	Site
> AMITY	City of Amity Pre-Con Notify		
> ARMYCORPWETLAND	Army Corp of Engineers-wetland Pre-Cc		
> ARMYCORPXING	Army Corp of Engineers - river crossing		
> AURORA	City of Aurora Pre-Con Notify		
> BANKS	City of Banks Pre-Con Notify		
> BARLOW	City of Barlow		
> BEAVERTON	City of Beaverton Pre-Con Notify		
> BLM	Bureau of Land Management Pre-Con N		
> BPA	Bonneville Power Administration Pre-Cr		
> CANBY	City of Canby Pre-Con Notify		

Select Records

View/Modify Conditions New Row

OK Cancel

General Value List

A general value list was created to house the municipality identification and contact information

- The value in the Key column must match the domain value for the Permit Pre-Construction Notifications subtypes
- Key Columns determine municipality and notification lead time.
- Attribute Columns contain the municipality email addresses

The screenshot displays the 'General Value List Details' form. At the top, there is a table with columns: Key 1, Key 2, Key 3, Key 4, Key 5, Description, and Disabled?. The table lists three entries: CLACKAMASCO, COPROW, and ODOTPERMIT. The ODOTPERMIT entry is selected, and its details are shown below the table. The details section includes a description, disabled status, and default status. Below this, there are sections for Key Columns and Attribute Columns. The Key Columns section shows Key 1: ODOTPERMIT and Key 2: OREGON DEPARTMENT OF TRANSPORTATION. The Attribute Columns section shows ten columns with email addresses: Column 1: Mardi Gilkey, Column 2: mardi.gilkey@pgn.com, Column 3: Nance Stone, Column 4: nance.stone@pgn.com, Column 5: Julie Hernandez, Column 6: jule.hernandez@pgn.com, Column 7: Linda Saddler, Column 8: linda.saddler@pgn.com, Column 9: (empty), and Column 10: (empty). At the bottom, there is a 'New Row' button, 'OK' and 'Cancel' buttons, and a 'Changed By' field with the value E06427 and a 'Change Date' field with the value 6/4/21 3:24 PM.

Key 1^	Key 2^	Key 3^	Key 4^	Key 5^	Description	Disabled?
> CLACKAMASCO	CLACKAMAS COUNTY				Clackamas County Post-Con Notification	<input type="checkbox"/>
> COPROW	CITY OF PORTLAND RIGHT OF WAY				City of Portland Right of Way Post-Con	<input type="checkbox"/>
> ODOTPERMIT	OREGON DEPARTMENT OF TRANSPORT				Oregon Department of Transportation Post-Con	<input type="checkbox"/>

Details

Description: Oregon Department of Transportation Post-Con Notif ☐ Disabled? ☐ Default? ☐

Key Columns

Key 1: ODOTPERMIT
Key 2: OREGON DEPARTMENT OF TRANSPORTATION

Key 3:
Key 4:
Key 5:

Attribute Columns

Column 1: Mardi Gilkey
Column 2: mardi.gilkey@pgn.com
Column 3: Nance Stone
Column 4: nance.stone@pgn.com
Column 5: Julie Hernandez
Column 6: jule.hernandez@pgn.com
Column 7: Linda Saddler
Column 8: linda.saddler@pgn.com
Column 9:
Column 10:

Changed By: E06427
Change Date: 6/4/21 3:24 PM

New Row

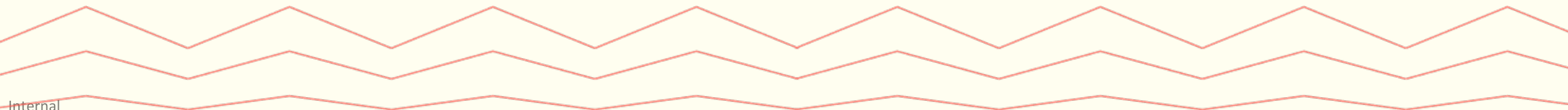
OK Cancel

Post-Construction Permitting Notification

Maximo automation script contains the conditions, frequency, and actions that Maximo uses to gather the list of work orders, email the list to the municipalities, complete the post-construction notification task, add a log note to the work order.

Work orders must meet the following conditions: **Post-construction notification do exactly?**

- All field work must be complete
- When the last scheduled field task is completed, the work order is picked up by the escalation script.
- Escalation runs every Monday at 6am



Communication Template

Template Details:

- :key## = References the keys/data associated with the municipalities in the PGE Value List.
- The fields: "To:", "cc:", and "bcc:" are unavailable as the script uses the information found in the PGE General Value list to send email notifications to the municipalities.

Message Details:

- The email message content is owned by the business and can be updated by Technical Business Analysts.
- The email pulls in the list of work orders based on the inserted value --WO LIST--which is written into the automation script.

Maximo template:

Maximo template:

Template Details

To: _____

cc: _____

bcc: _____

★ **Send From:** mxeam02d@pgn.com

Reply To: _____

Subject: PGE Work Completed for :key02

Message:

Font: _____ Size: _____ Format: None

Provided below are the list of permits for PGE jobs that have been completed for :key02

--WO LIST--

Please reply to all with inquiries.

Email sample:

From: mxeam02d@pgn.com <mxeam02d@pgn.com>

Sent: Monday, June 7, 2021 6:04 AM

To: Mardi Gilkey <Mardi.Gilkey@pgn.com>; Nance Stone <Nance.Stone@pgn.com>; Julie Hernandez <Julie.Hernandez@pgn.com>; Linda Saddler <Linda.Saddler@pgn.com>

Subject: PGE Work Completed for CITY OF PORTLAND RIGHT OF WAY

Provided below are the list of permits for PGE jobs that have been completed for CITY OF PORTLAND RIGHT OF WAY

Work Order	Permit	Street Address	Completion Date
M2041344	75445	6030 SE 52ND AVE	5/27/21 6:52 AM
M2410882	73637	3729 SE 22ND AVE	5/27/21 6:51 AM
M2897863	75453	1638 W BURNSIDE ST	5/24/21 7:53 AM
M3027434	76997	6207 SE MILWAUKIE AVE	5/27/21 6:52 AM

Please reply to all with inquiries.

Results



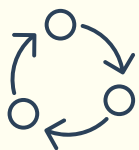
PGE

Maximo Savings

Effort	Original Estimate Hours	Maximo Dev/Test /UAT Hours	Notes
Permit Notifications Portal vs Maximo Only Solution	1500 (For creating new Portal)	130	87 hours of development 9 hours of test 30 hours of user acceptance testing 9 hours of design/meetings

Permitting Notifications Automation

Effort	Status	Municipalities	Expected Impact
Post-Construction Notifications	Active	~60	~800 hours of manual work saved annually
Pre-Construction Notifications	Active		500+ hours of manual work saved annually



Improved **internal efficiency** and faster **cycle time**



Eliminated source of **human error**



Increased **satisfaction** from our municipal partners



471 emails sent to our municipal partners

