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# Product Implementation Training (PIT)

IBM Content Platform Engine 5.2.1

Notifications



## Introduction

- An introduction to a new event notification feature in CPE 5.2.1.
- Users may elect to be notified of events on documents or folders via email (or queries against CPE).
- Users may elect to receive email notification immediately at the time the event fires or have emails bundled together in a daily or weekly summary. Note that this setting is not global but on a per document or folder basis.
- A future release of IBM Content Navigator will support notifications.
- At the release of CPE 5.2.1, no client exists that supports notifications.
- Activity Stream Notifications for Connections and the new Notification Email feature may be installed and function in the same object store, even on the same objects.

## Course Roadmap

### ➔ Required AddOns for Notification Support

- Notification Generation Rules
- Notification Methods
- Events Eligible for Notification
- High Level Architecture
- Sweep Framework
- Notification Interest Class
- Notification User Class
- Notification Queue Entry Class
- Notification Item Class
- Collaboration Configuration Class

## Required AddOns for Notification Support

- *5.2.1 Teamspace Extensions*
- *5.2.1 Custom Role Extensions*
- *5.2.1 Social Collaboration Role Extensions*
- *5.2.1 Social Collaboration Base Extensions*
- *5.2.1 Email Services Extensions \**
- *5.2.1 Social Collaboration Notification Extensions for Content Navigator \**

*\* new for CPE 5.2.1*

## Notification Generation Rules

- 1. Notifications will be generated for eligible events that occur on any document or folder in an object store as long as any user has declared an interest in the object.*
- 2. If a user declares an interest in a Teamspace, they will receive notifications on eligible events that occur on the Teamspace folder (if they continue to have view rights) and all documents and subfolders within the Teamspace (where they have view rights).*
- 3. If a user declares an interest in a specific document, they will receive notifications on all eligible events as long as they continue to have view rights on the document.*
- 4. If a user declares an interest in a specific non-Teamspace folder, they will receive notifications on all eligible events as long as they continue to have view rights on the folder, plus all documents and subfolders directly contained within the folder (where they have view rights). To be clear, declaring an interest in a folder DOES NOT propagate throughout the subfolder hierarchy of the folder.*

## Notification Methods

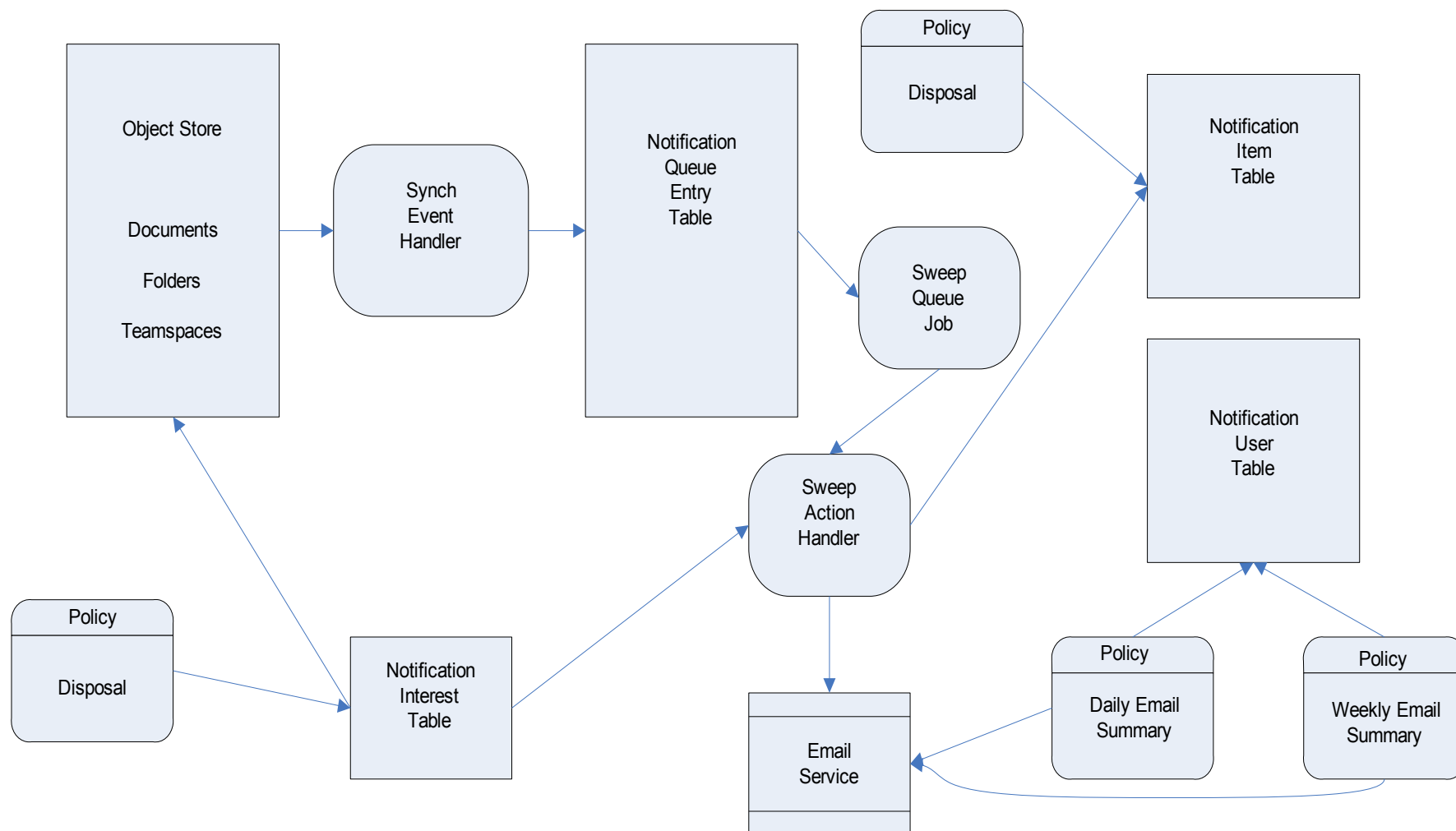
When a user declares an interest in a document or folder, they can select the type of notification they want for events on that object:

- *No Email*
  - Queries may be run against Notification Item Table.
- *Immediate Email*
  - Event notification emailed at time of event.
- *Daily Summary*
  - Event Notification is not emailed at the time of the event but all events that occurred since last daily summary for a given user are bundled together into a single summary email.
- *Weekly Summary*
  - Event Notification is not emailed at the time of the event but all events that occurred since last weekly summary for a given user are bundled together into a single summary email.

## Events Eligible for Notification

- *Document Events*
  - Update
  - Checkin
  - Checkout
- *Folder Events*
  - Create
  - Delete
  - Update
- *Version Series Events*
  - Deletion
  - Mark For Delete
  - Recover
- *Dynamic Referential Containment Relationship Events*
  - Create

## High Level Architecture Overview





## Sweep Framework – Queue Sweeps

### Notification Queue Entry Table

- *Event Handlers capture data about objects and the events that fire on them and persist this captured data to the Notification Queue Entry table.*
- *The sweep framework is configured to sweep this table and provide a list of objects to a Sweep Action Handler implementation for Notifications.*
- *The Sweep Action Handler implements the logic to persist the event data to the Notification Item table and if any users have selected a notification method of immediate email, generates an email header, body and footer and persists that to the Email Services table.*

## Sweep Framework – Policy Sweeps

### Notification User Table

- *Policy sweeps are configured to support generation of daily and weekly email summary, one each for daily and weekly summary sweeps.*
- *Both daily and weekly sweeps retrieve rows from the Notification User table where the user requires daily|weekly sweeps and the last sweep time against the user exceeds the daily|weekly boundary.*
- *Example filter:*
  - *ClbDailySweepRequired = true AND ClbLastDailySweep > Now() + Timespan(1, 'days').*
- *The sweep passes the Notification User rows to a sweep action handler that queries the Notification Item table for event data that meets the the time and notification method criteria.*

## Sweep Framework – Disposition Sweeps

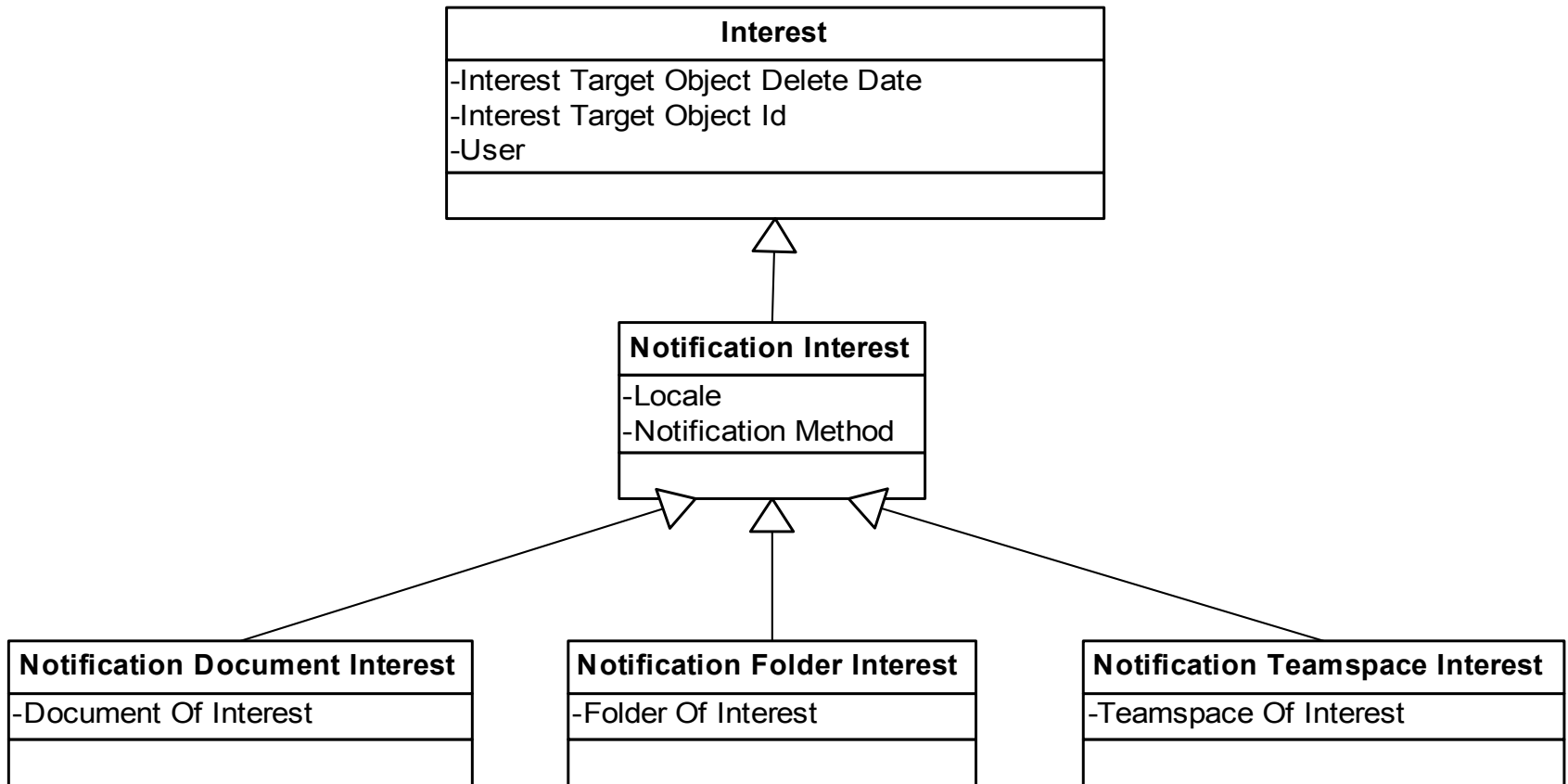
### Notification Interest Table

### Notification Item Table

- *A disposition sweep is configured to delete Notification Items that have aged out (create date greater than 30 days ago).*
- *A disposition sweep is configured to delete Notification Interests where the target object referenced by the interest has been deleted and the delete occurred more than 30 days ago.*

## Notification Interest Class

- Users declare an interest in a document, folder or teamspace by creating instances of the *Notification Document|Folder|Teamspace Interest* classes below:



## Notification User Class

- *Notification User instances help manage daily and weekly email summary generation via the sweep required and last sweep values*

Notification User
-Daily Sweep Required -Last Daily Sweep -Last Weekly Sweep -User -Weekly Sweep Required

## Notification Queue Entry Class

- *As events fire in an object store, data about the event is captured and persisted in instances of Notification Queue Entry.*

Notification Queue Entry
<ul style="list-style-type: none"><li>-Actor</li><li>-Comment Text</li><li>-Document Major Version</li><li>-Document Minor Version</li><li>-Event Date Time</li><li>-Event Type</li><li>-Interest Target Object Id</li><li>-Object Class</li><li>-Object Id</li><li>-Object Name</li><li>-Tag Value</li><li>-Target Id</li><li>-Target Name</li><li>-Version Series Id</li><li>-Interests</li></ul>

## Notification Item Class

- Instances of Notification Item persist event data and, along with the email templates, are used to generate email.

Notification Item
<ul style="list-style-type: none"><li>-Actor</li><li>-Comment Text</li><li>-Document Major Version</li><li>-Document Minor Version</li><li>-Event Date Time</li><li>-Event Type</li><li>-Interest Target Object Id</li><li>-Object Class</li><li>-Object Id</li><li>-Object Name</li><li>-Tag Value</li><li>-Target Id</li><li>-Target Name</li><li>-Version Series Id</li></ul>

## Custom Object Class

- The Collaboration Configuration class has been extended to support Notifications.
  - Notification Base URL: defines base for embedded email links
  - Notification Email Date Format: pattern string to format date strings in email

Collaboration Configuration
-Notification Base URL
-Notification Email Date Format



## Contacts

- Product Manager: Steve Hussey
- Subject Matter Experts (SME)/Area of Expertise:
  - Derek Ricci/Email Services
  - Frank Hayes/Notifications

## Product Help/Documentation/Resources

### **Social Collaboration Notification Extensions for Content Navigator**

An abbreviated topic for the add-on that basically just lists (and briefly describes) the classes.

[http://www.ibm.com/support/knowledgecenter/SSNW2F\\_5.2.1/com.ibm.p8.ce.admin.tasks.doc/p8pcc145.htm](http://www.ibm.com/support/knowledgecenter/SSNW2F_5.2.1/com.ibm.p8.ce.admin.tasks.doc/p8pcc145.htm)