2GPM

Second Generation Package Manager

This package contains four tabs that help to preview aggregated information about 2G packages, versions, push upgrades, subscribers.

Since this is not possible to make standard reports on object Package, PackageVersion, PackageSubscriber, PushUpgrades, PushJob, PushJobError, and this is not possible to create a custom report type including these objects, it is open opportunity to fulfill this niche by a custom package on AppExchange.

Also another package available on AppExchange called Package Visualizer doesn't provide this functionality. Actually it provides it partially: it is possible to see the list of subscribers for a particular package or package version but it is not possible to see the whole list of subscribers or the whole list of package versions or the whole list of push upgrades. Also it is not possible to export the list of subscribers as a CSV file.

Package Usage

Package contains a custom Lightning Application which consists of four tabs.

Packages tab

Packages tab contains on the top part of the page aggregated information about total number of installs of particular package id. It doesn't display packages which do not have any package versions. The bottom part of the page contains detailed aggregated information about package installs number per Org Status and Org Type.

It is possible to filter out Org Status to see information about installs only on specific Org Status in the bottom part.

It is possible to search against all fields (including Id), search affects both top and bottom panes.

Top pane includes also addressable links to list of versions and list of subscribers of a particular package.

Versions tab

Versions tab contains on the top part of the page aggregated information about total number of installs of particular package version id. Not Installed Beta Versions are always hidden intentionally on the aggregated view. However, it is possible to display installed beta versions or released versions that are not installed yet by unchecking appropriate checkboxes. For a released package version, push upgrade action is available to create push upgrade request and redirect to the corresponding tab.

The bottom part of the page contains detailed aggregated information about the number of package versions installations per Org Status and Org Type. By default it displays Released versions only, however, it is possible to display beta versions by unchecking the relevant checkbox. There is an option to download CSV data displayed on the bottom pane.

It is possible to filter out Org Status to see information about installs only on specific Org Status in the bottom part.

It is possible to search against all fields (including Id), search affects both top and bottom panes.

Top pane includes also addressable links to list of push upgrades and list of subscribers of a particular package version.

Upgrades tab

Upgrades tab contains detailed information about planned, pending and performed push upgrades. The last view column contains a link to see push upgrade details.

It is possible to search against all fields (including Id).

When a particular upgrade is selected, information is displayed about push jobs and push errors.

When a particular upgrade is selected in Created status, an additional list of plausible subscribers for upgrade selection is displayed. The user can select subscribers for an upgrade. The user can update scheduled start date time or keep it blank. The user can schedule or start the push upgrade by clicking the appropriate button.

Subscribers tab

Subscribers tab contains detailed information about subscribers.

It is possible to search against all fields (including Id).

It is possible to filter out Org Status to see information about installs only on specific Org Status.

It is possible to download the selected list as a CSV file.

Security Considerations

Versions, upgrades and subscribers tab provide options for addressable links, which might be considered as potential security issue with possible SOQL injection, however, actually, the passed link parameters are stripped of any single quotes, so it is not possible to hijack components with SOQL injection.

After the Security Review failed for the previous submission, a new submission includes three permission sets and one permission set group. Also I created a new package to have a distinct namespace prefix.

Permission Set Package Manager Basic contains custom permission Package Manager Basic and provides access to packages, versions, subscribers tabs.

Permission Set Package Manager Push Upgrades contains custom permission Package Manager Push Upgrades and provides access to upgrades tab and system permission to manage second-generation packages.

Permission Set Package Manager Extract contains CRUD permission to Document standard object and provides access to extract functionality (Download CSV file of versions or subscribers list).

Now the user is not displayed the download CSV button when the user lacks access to Document standard object.

Permission Set Group Package Manager Full contains access to all of these three permission sets and provides access to full functionality of the package.