



Package Visualizer Guide

Second Generation Managed Packaging (2GP) ushers a new way for AppExchange partners to develop, distribute and manage their apps and metadata. Today, all of the packaging operations and automation work with the Salesforce CLI but a self-service user interface and experience are not available

Package Visualizer solves this problem by setting up a one-stop shop where partners can visualize their packages and their respective version's ancestry. Additionally, they can also get a 360° view of their subscribers with the help of AppAnalytics and LMA integration

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- [🔗 App Analytics](#)
- [🔗 Push Upgrades](#)
- [🔗 License Management App](#)
- [🔗 Limits, Resources, and FAQs...](#)



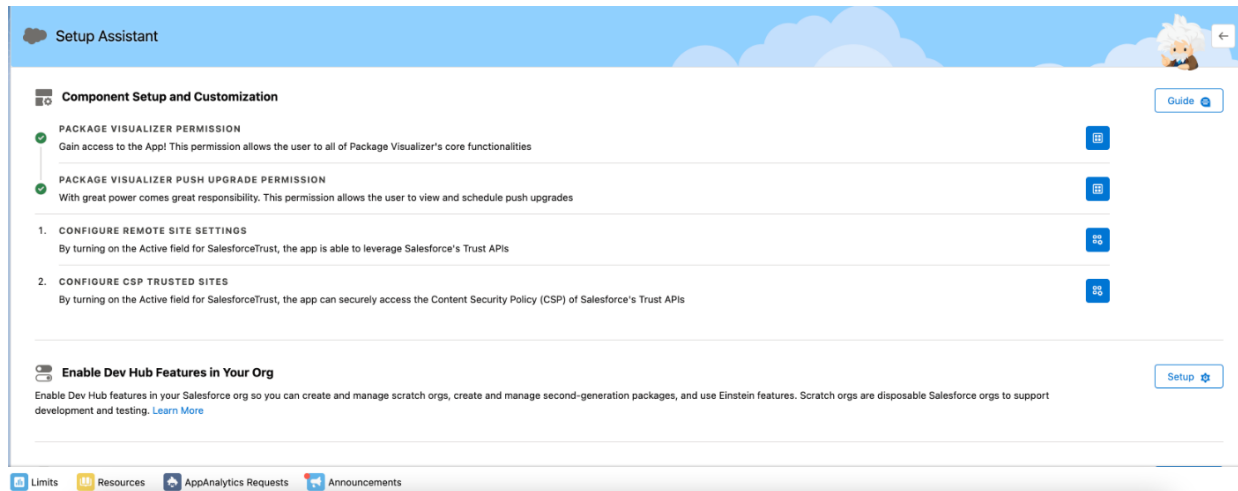
Installation and Setup

AppExchange Listing: <https://appexchange.salesforce.com/appxListingDetail?listingId=a0N4V00000FNBc0UAH>

Version 2.12

- **Installation URL:** <https://login.salesforce.com/packaging/installPackage.apexp?p0=04t5w000000avqJAAQ>
- **SFDX Install:** `sfdx force:package:install -p 04t5w000000avqJAAQ -w 20`

SETUP AND CONFIGURATION



Ask your System Admin to provide the appropriate permissions sets below in order to gain access to the app. If you see any exceptions/illustrations, the user most likely does not have the relevant permission sets assigned to them

- **Package Visualizer Permission**
 - Allows the user to gain access to all of the app's core functionalities
- **Package Visualizer Push Upgrade Permission**
 - Allows the user to gain access to the Push Upgrade functionalities
- **Remote Site Settings**
 - Go to Setup → Remote Site Settings → **SalesforceTrust**
 - Enable the checkbox for the Active field
- **CSP Trusted Sites**
 - Go to Setup → CSP Trusted Sites → **SalesforceTrust**
 - Enable the checkbox for the Active field

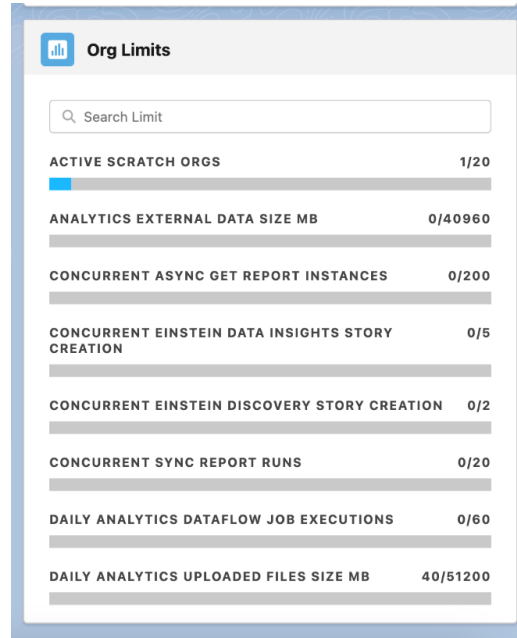
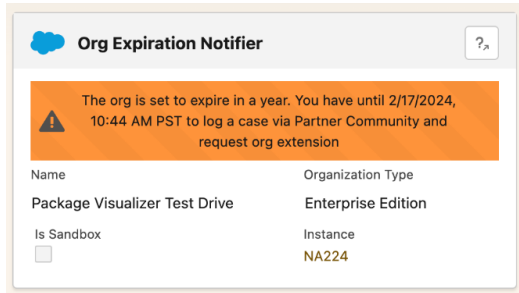
For further help, use the **Setup Assistant** guidelines and resources to get started on your packaging journey...

HOW TO USE

- From the App Launcher, go to the **Package Visualizer** Lightning App page to view 2GP and Unlocked Packages
- From the App Launcher, go to the **First Generation Package Visualizer** Lightning App page to view 1GP and Unmanaged Packages
- **Org Limits** Lightning Web Components displays all the [Limits](#) associated with an org. This component can be accessed via [Utility Bar on a Lightning App](#) or via Lightning App Builder on the Home or App

page

- **Org Expiration Notifier** Lightning Web Component displays when an org is about to expire. This component can be accessed via the Lightning App Builder on the Home or App page



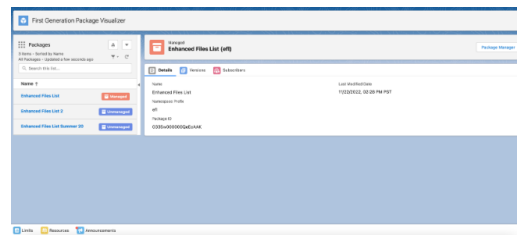
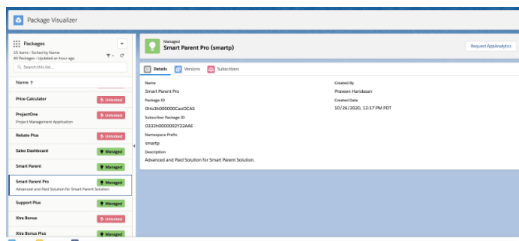
Packages, Versions, and Subscribers

Note: The app is supported for **Second Generation Managed Packages (2GP)** and **Unlocked Packages** in a Dev Hub org

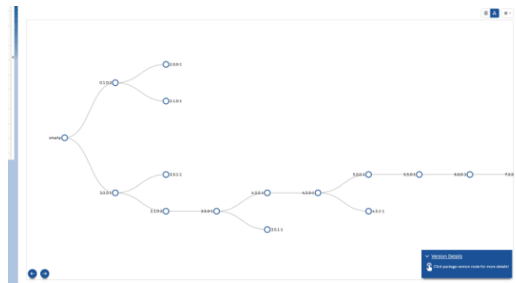
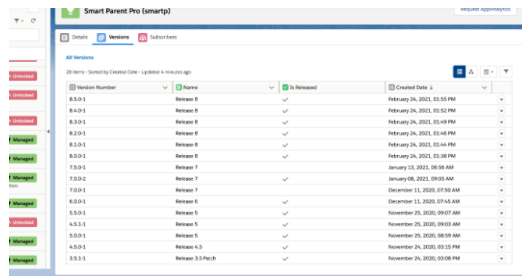
Note: The app is supported for **First Generation Managed Packages (1GP)** and **Unmanaged Packages** in a Developer Edition (DE) org

The app is built upon a split view design that allows the users to navigate between Unlocked or 2GP Managed Packages while staying on the same screen.

Based on the chosen package, the user can review further information on package details, versions, and subscribers



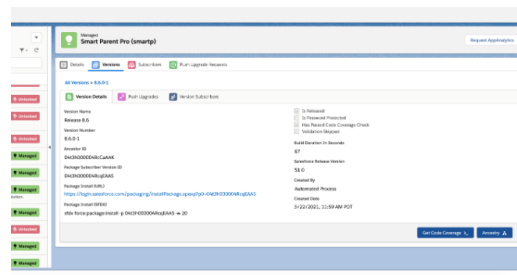
The **Versions** tab can be toggled between two visualizations: **data-table** and **ancestry tree chart**



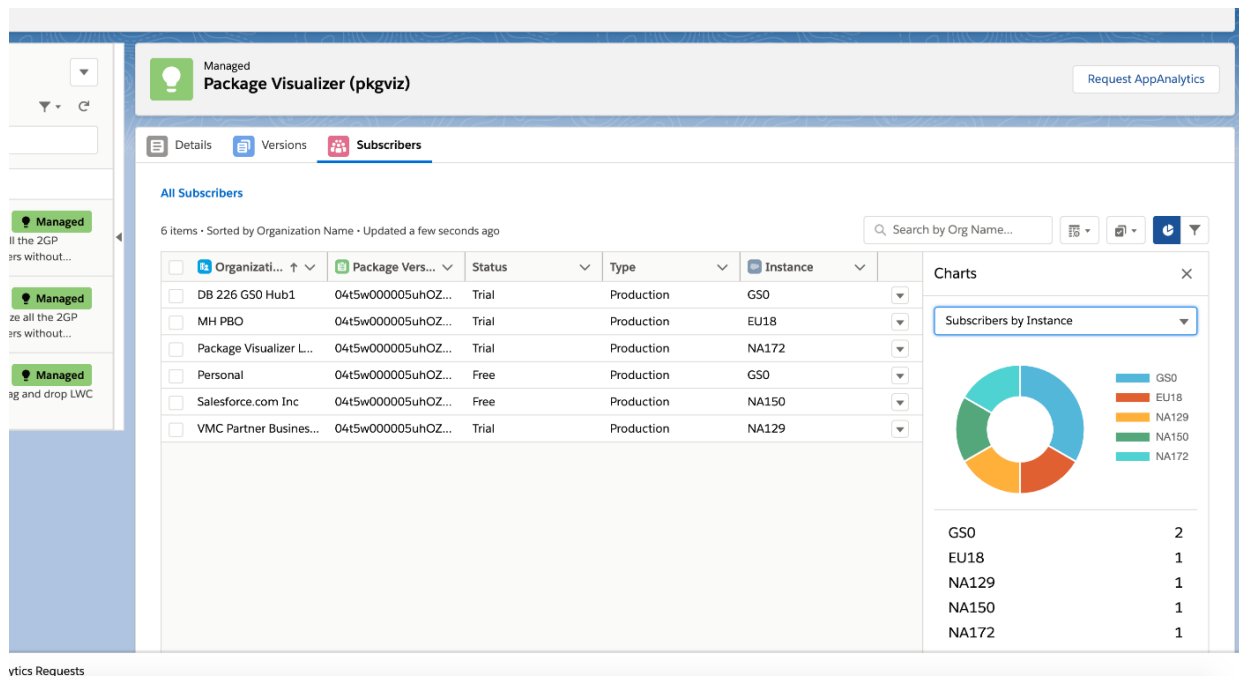
Limitation: Currently, the ancestry visualization only supported for 2GP Managed Packages that have less than 2000 released versions

The **Show Details** row action for version records is further split into at least 4 sub-tabs:

1. **Version Details** provides more granular information on the package version
2. **Push Upgrades** allows you to schedule upgrades to a newer version of your package
3. **Version Subscribers** lists the subscribers who have installed this specific version
4. **License Management App** provides further details and a timeline on the licenses associated with this package version



Lastly, the **Subscribers** tab lists all Orgs that have installed your package. Furthermore, the chart toggle button allows you to view visualizations of your subscriber data



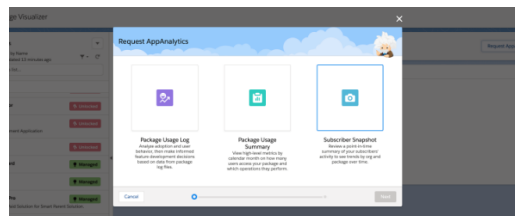
Unlocked Packages: ✓
 2GP Managed Packages: ✓
 1GP Managed Packages: ✓



App Analytics

- **Note:** AppAnalytics is only available for packages that have passed security review and are registered to a License Management App (LMA)
- **Note:** In a 24-hour period, you can download a maximum of 20 GB of AppExchange App Analytics data

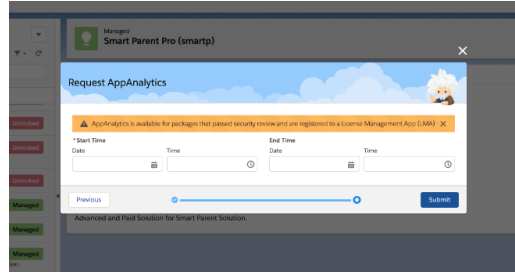
1. Before requesting logs, you need to log a case with Salesforce Support to [Enable AppAnalytics](#)
2. For 2GP Managed Packages, the user can view the **Request AppAnalytics** action button on the right corner of the package header
3. Once clicked, the user can choose to request data based on 3 different types
 - a. [Package Usage Log](#)
 - b. [Package Usage Summary](#)



c. Subscriber Snapshot

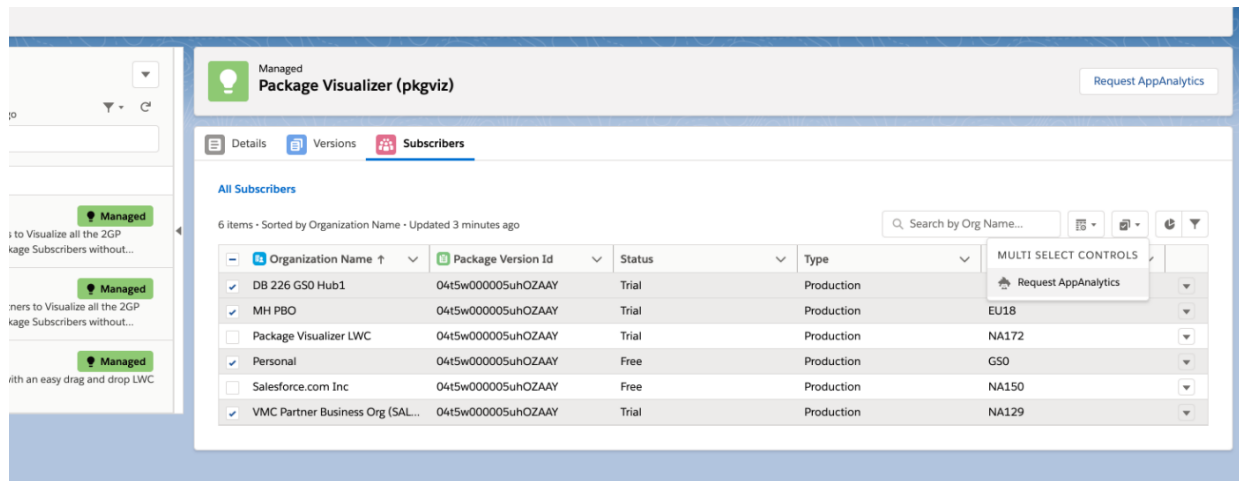
4. The user then proceeds to complete the form request by inputting the required date-time fields

Note: The download link to the .csv file expires 1hr after the request is processed



To request targeted logs for specific Subscribers:

1. You can select up to **15 Orgs** via the row selection checkboxes from any of the Subscriber related data-table
2. Then click on the **Request AppAnalytics** menu-item under the Multi-Select Controls menu



Organization Name	Package Version Id	Status	Type	Request AppAnalytics
DB 226 GSO Hub1	04t5w000005uhOZAAY	Trial	Production	EU18
MH PBO	04t5w000005uhOZAAY	Trial	Production	NA172
Package Visualizer LWC	04t5w000005uhOZAAY	Trial	Production	GS0
Personal	04t5w000005uhOZAAY	Free	Production	NA150
Salesforce.com Inc	04t5w000005uhOZAAY	Free	Production	NA129
VMC Partner Business Org (SAL...	04t5w000005uhOZAAY	Trial	Production	

Once the request is submitted, the user can then view the status and eventually download their .csv file from the **AppAnalytics Requests** docked utility bar.

Packages
3 items • Sorted by Name
All Packages • Updated 15 minutes ago

Search this list...

Name ↑

AppAnalytics Requests

- AAQR-0017 View
- AAQR-0016 View
- AAQR-0015 View
- AAQR-0014 View

Managed Package Visualizer (pkgviz)

Versions Subscribers

27 items • Sorted by Created Date • Updated a few seconds ago

Version Number	Name	Is Released
0.24.0-1	Version 0.24	✓
0.23.0-1	Version 0.23	✓
0.22.0-2	Version 0.22	✓
0.22.0-1	Version 0.22	
0.21.0-1	Version 0.21	✓
0.20.0-1	Version 0.20	✓
0.19.0-1	Version 0.19	✓
0.18.0-1	Version 0.18	✓
0.17.0-1	Version 0.17	✓
0.16.0-1	Version 0.16	✓
0.15.0-2	Version 0.15	✓
0.15.0-1	Version 0.15	
0.14.0-1	Version 0.14	✓

Limits Resources AppAnalytics Requests

Note: If the custom docked utility bar is overlaid by the default Lightning App's utility bar, then click on the menu dropdown options and choose the AppAnalytics Requests menu item to review the status

To request AppAnalytics for 1GP Managed Packages, drag and drop the AppAnalytics Package Request Managed Component onto the Package (sfLma__Package__c) Object Record Detail page from the Lightning App Builder

Package Visualizer

Edit Refresh Licenses Delete

Details

Package Visualizer

Developer Name: Package Visualizer LWC

Developer Org ID: 00D5w00000215HBEAY

Lead Manager

Last Modified By: 1/24/2023, 8:49 PM

Activity

Filters: All time • All activities • All types

Refresh Expand All View All

Upcoming & Overdue

No activities to show. Get started by sending an email, scheduling a task, and more.

No past activity. Past meetings and tasks marked as done show up here.

AppAnalytics Request

- AAQR-0167 View
- AAQR-0165 View
- AAQR-0164 View

Note: AppAnalytics Package Request Managed Component will only work when dragged and dropped onto the Package (sfLma__Package__c) Object Record Detail page

Unlocked Packages: ✗

2GP Managed Packages: ✓

1GP Managed Packages: ✓

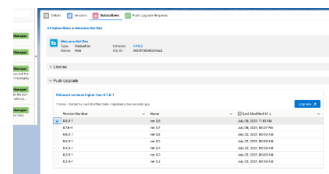
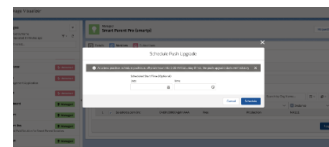
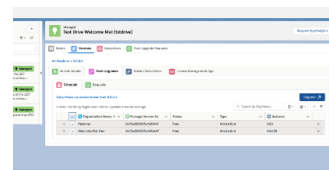


Push Upgrades

Note: Push Upgrades functionality is only available if the user is assigned the following permission set: Package Visualizer Push Upgrade Permission

With great power comes great responsibility. Review ISVforce Guide's [Push Upgrade Best Practices](#) before scheduling upgrades for your customers

1. Go to the respective package version record where you would like to upgrade your subscribers to
2. Under the **Push Upgrades** sub-tab and the subsequent **Schedule** sub-tab, the user can view all the subscribers that are eligible to be upgraded to this package version
3. Choose the eligible subscribers via row selections from the data-table
4. Click on the **Upgrade** action button and complete the form by inputting the date-time field. If you don't specify the scheduled start time then the push upgrade request starts immediately.



Push Upgrades are also available for single subscribers as well

1. Go to a respective **Subscriber Detail** section
2. Expand on the **Push Upgrades** tab
3. Choose the relevant higher version that you would like to upgrade to for the Subscriber

Limitation: You can only select up to 10,000 Subscribers for a single Push Upgrade Request

The **Push Upgrade Requests** tab allows the user to view all the push requests at a package level. Initially, the requests are only loaded for the 50 most recently created package versions. But the data can be extended via the slider in the filter panel to include more package versions

Smart Parent Pro (SmartP)

Details

Versions

Subscribers

Push Upgrade Requests

All Push Requests

23 Items - Sorted by Last Modified At - Updated 3 minutes ago

50 Package Versions - Sorted by Created Date

Push Request Id	Package Version Id	Scheduled Start Time	Status	Last Modified At
1	0DV3h0000004K1GAE	0413h000004RcEAA5	April 03, 2021, 11:00 PM	Failed
2	0DV3h0000004K19GAE	0413h000004RcCAAK	March 29, 2021, 06:31 PM	Failed
3	0DV3h0000004K01GAE	0413h000004jpm4AAA	March 21, 2021, 12:07 AM	Canceled
4	0DV3h0000004JzwGAE	0413h000004jpm4AAA	March 21, 2021, 12:03 AM	Canceled
5	0DV3h0000004JzrGAE	0413h000004RcCAAK	March 19, 2021, 09:01 PM	Failed
6	0DV3h0000004JzmGAE	0413h000004jpm4AAA	March 19, 2021, 03:30 PM	Failed
7	0DV3h0000004JzhGAE	0413h000004RcCAAK	March 19, 2021, 09:06 AM	Failed
8	0DV3h0000004Jz5GAU	0413h000004RcCAAK	March 18, 2021, 01:44 PM	Canceled
9	0DV3h0000004JwvGAE	0413h000004RcCVA0	March 03, 2021, 10:39 PM	Canceled
10	0DV3h0000004Jx2GAE	0413h000004RcCVA0	March 03, 2021, 10:53 PM	Canceled
11	0DV3h0000004Jx7GAE	0413h000004RcCVA0	March 03, 2021, 11:02 PM	Canceled
12	0DV3h0000004JxCGAU	0413h000004RcCVA0	March 03, 2021, 11:03 PM	Canceled
13	0DV3h0000004JxHGAU	0413h000004RcCVA0	March 03, 2021, 11:04 PM	Canceled
14	0DV3h0000004JyAGAU	0413h000004RcCAAK	March 10, 2021, 12:53 PM	Canceled
15	0DV3h0000004JxvGAE	0413h000004RcCAAK	March 09, 2021, 04:25 PM	Failed
16	0DV3h0000004JxWGAU	0413h000004jpm4AAA	March 03, 2021, 11:15 PM	Failed
17	0DV3h0000004JxRGAU	0413h000004RcCQAA0	March 03, 2021, 11:12 PM	Failed
18	0DV3h0000004JxMGAU	0413h000004RcCVA0	March 03, 2021, 11:07 PM	Failed
19	0DV3h0000004JwsGAE	0413h000004RcCAAK	March 03, 2021, 01:07 PM	Failed

Filters

Latest Package Versions Limit

1-500

50

Status

Available

Selected

Created

Pending

In Progress

Succeeded

Canceled

Failed

Reset

Submit

Note: For 2GP Managed Packages, you can only schedule Push Upgrades to package versions that have been approved by AppExchange's Security Review

Unlocked Packages: ☒
 2GP Managed Packages (Security Review Approved): ☒

License Management App

Note: The integration is only functional when your Dev Hub is connected to your Partner Business Org (PBO) where the License Management App (LMA) is installed

To view a list of licenses and more details for a certain managed package version in your LMA:

1. Go to the **Versions** tab, choose a package version by clicking on the **Show Details** row action
2. Then under the **License Management App** sub-tab, you should be able to view all the LMA details pertaining to the chosen version

Package Visualizer (pkgviz)

Details Versions Subscribers

All Versions > 0.26.0-1

Version Details Push Upgrades Version Subscribers License Management App

Version 0.26
 Package: [Package Visualizer](#)
 Release Date: 3/21/2021, 05:00 PM PDT
 Created Date: 3/22/2021, 03:22 PM PDT

▼ Licenses

All Licenses
 6 items - Sorted by License Name - Updated 5 minutes ago

	License Name ↑	Lead	Account	Contact	Lead Source	License Status	
1	L-00000	Praveen Haridasan			Package Installation	Active	▼
2	L-00001	Praveen Haridasan			Package Installation	Active	Show Details ▢
3	L-00002	Admin User			Package Installation	Active	▼
4	L-00003	Vivek Chawla			Package Installation	Active	▼
5	L-00004	Michael Holt			Package Installation	Active	▼
6	L-00005	Ronit Nuguru			Package Installation	Active	▼

Furthermore, you can visualize the Licence's **Activity Timeline** or **Modify License** by clicking on the **Show Details** row action

Licenses

All Licenses > License Details

 L-00005 Lead: Ronit Nuguru	Lead Source: Status: Install Date:	Package Installation Active Mar 23, 2021
--	--	--

[Activity Timeline](#)

 Modify License

 Package Expiration Date was Updated Does not Expire to 2021-03-27	Mar 24, 2021
 Package Expiration Date was Updated 2021-03-31 to Does not Expire	Mar 24, 2021
 Package Expiration Date was Updated Does not Expire to 2021-03-31	Mar 24, 2021
 Package Licensed Seats was Updated 10 to Unlimited	Mar 24, 2021
 Package Licensed Seats was Updated Unlimited to 10	Mar 24, 2021
 Package Status was Updated Suspended to Active	Mar 24, 2021
 Package Status was Updated Active to Suspended	Mar 24, 2021
 Package Status was Updated Suspended to Active	Mar 24, 2021

[View More](#)

You can also change a customer's access to your offering by modifying a license record. For example, increase or decrease the number of seats included with a license, change the expiration date, or suspend access to your app

is without...

Managed

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Managed

g and drop LWC

Version 0.26

Package: Package Visualizer

Release Date: 3/21/2021, 05:00 PM PDT

Created Date: 3/22/2021, 03:22 PM PDT

Licenses

All Licenses > License Details

L00005

Lead: Ronit Nuguru

Lead Source: Status: Install Date: Package Installation Active Mar 23, 2021

Activity Timeline

Modify License

Does not Expire ☒

Expiration Date

Status Active

Site License ☒

Seats

Edit

tics Requests

Note: The integration is only available for versions that have an associated LMA Package Version record in the org

Unlocked Packages: ✗
 2GP Managed Packages: ✓
 1GP Managed Packages: ✗



Limits, Resources, and FAQs...

To view metrics of your Dev Hub org, expand on the **Limits** panel of the docked utility bar. Additionally, to review curated resources regarding 2GP, expand on the **Resources** panel of the utility bar

Packages

3 Items - Sorted by Name

All Packages - Updated 12 minutes ago

Search this list...

Limits

ACTIVE SCRATCH ORGS 0/30

DAILY SCRATCH ORGS 0/40

PACKAGE2 VERSION CREATES 0/40

PACKAGE2 VERSION CREATES WITHOUT 0/500

Managed Package Visualizer (pkgviz)

Details Versions Subscribers

All Versions > 0.26.0-1

Version Details Push Upgrades Version Subscribers

Version 0.26 Package: Package Visualizer Release Date Created Date

Licenses

All Licenses

6 Items - Sorted by License Name - Updated a minute ago

License Name	Lead	Account
L00000	Pavleen Haridisan	
L00001	Pavleen Haridisan	
L00002	Admin User	
L00003	Vivek Chawla	

Limits

Resources

AppAnalytics Requests

Packages

3 Items - Sorted by Name

All Packages - Updated 12 minutes ago

Search this list...

Resources

1. PACKAGE VISUALIZER GUIDE

2. DEEP DIVE: 2GP FOR ISVS

3. SECOND-GENERATION MANAGED PACKAGES

Managed Package Visualizer (pkgviz)

Details Versions Subscribers

All Versions > 0.26.0-1

Version Details Push Upgrades Version Subscribers

Version 0.26 Package: Package Visualizer Release Date Created Date

Licenses

All Licenses

6 Items - Sorted by License Name - Updated a few seconds ago

License Name	Lead	Account
L00000	Pavleen Haridisan	
L00001	Pavleen Haridisan	
L00002	Admin User	
L00003	Vivek Chawla	

Limits

Resources

AppAnalytics Requests

ANNOUNCEMENTS

Check out the Announcements Utility bar to review the latest announcements, updates, and guidance about Package Visualizer

The screenshot displays the Salesforce Package Visualizer interface. On the left, the 'Packages' section shows 5 items sorted by name, with a search bar and filters. Below this, the 'Announcements' utility bar is expanded, showing four items: 'Package Upgraded' (version 1.9), 'Configure Remote Site Settings', 'Configure CSP Trusted Sites', and 'Configure Release Update'. The main panel shows the details for the 'Managed Apex Datasource (adst)' package. The details include the package name, ID, subscriber package ID, namespace prefix, and description. The bottom navigation bar includes links for Limits, Resources, AppAnalytics Requests, and Announcements.

Packages
5 items • Sorted by Name
All Packages • Updated 4 minutes ago
Search this list...

Announcements

- Package Upgraded**
Your package has been upgraded to version 1.9
- Configure Remote Site Settings**
Enable SalesforceTrust in Setup's Remote Site Settings
- Configure CSP Trusted Sites**
Enable SalesforceTrust in Setup's CSP Trusted Sites
- Configure Release Update**
Disable Test Run in the "Enable Secure Static Resources for Lightning Components" Release Update

Managed Apex Datasource (adst)

Details Versions Subscribers Push Upgrade Requests

Name
Apex Datasource

Package ID
0Ho5w000000KyznCAC

Subscriber Package ID
0335w000000Mf85AAC

Namespace Prefix
adst

Description
Test Package (Needs to be deprecated)

Limits Resources AppAnalytics Requests Announcements

You can further skill up and learn about 2GP by visiting [Trailhead](#):

- Trailmix - [Deep Dive: 2GP for ISVs](#)
- Trail - [Build App Together with Package Development](#)
- Module - [Second-Generation Managed Packages](#)