salesforce

The Admin's Guide to Entitlement Management

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INTRODUCTION TO ENTITLEMENT MANAGEMENT

What's Entitlement Management?

Entitlement management helps you provide the correct support to your customers. Its variety of features let you define, enforce, and track service levels as part of your support management process.

Entitlement management features include:

- *Entitlements,* which let support agents determine whether a customer is eligible for support.
- *Entitlement processes,* which let you design timelines that include all the steps that your support team must complete to resolve support records like cases or work orders.
- *Service contracts,* which let you represent different kinds of customer support agreements like warranties, subscriptions, or maintenance agreements. You can restrict service contracts to cover specific products.
- *Experience access to entitlements,* which lets Experience users view entitlements and service contracts and create support records from them.
- *Reporting on entitlement management,* which lets you track the way entitlements are used in your Salesforce org and whether service contract terms are being met.

Because entitlement management is highly customizable, you have full control of which features you use and how you set them up to reflect your customer support model. We'll walk you through important planning decisions and setup steps to help you make the most of entitlement management. To get started, we recommend that you check out the Entitlement Management Trailhead module: Entitlement Management.

⊘ Important: Only users in orgs with the Service Cloud can enable, create, and update entitlement management items.

Entitlements: Terms to Know

Learn useful terms related to entitlement features in Salesforce.

Entitlement
A unit of customer support in Salesforce, such as "phone support" or "web support." It's typically used to represent terms in warranties. You can associate entitlement with accounts, assets, contacts, and service contracts. View entitlements from the Entitlements tab or the Entitlements related list on accounts, assets, contacts, and service contracts.

☑ Note: In Lightning Experience, the Entitlements related list isn't available on Contacts.

Entitlement Contact
Contacts who are entitled to customer support—for example, a named caller. The Contacts related list on an entitlement shows which contacts are eligible for that entitlement. You can remove or add contacts directly from the related list, or by updating the contact record itself. Your business may not allow you to provide support to customers unless they are a contact on the entitlement.

> **Note:**
> - Contacts on an account don't automatically inherit the account's entitlements. Depending on your business processes, you may need to create a separate entitlement for each contact on an account. You can also set up an Apex trigger that automatically assigns an entitlement to a contact when you create the contact.
> - Entitlement contacts don't have page layouts, search layouts, buttons, links, or record types.
> - The same visibility and sharing settings that apply to the parent account apply to contacts. Associating a contact with an entitlement doesn't share the entitlement record with the contact or the related experience user.

Entitlement Template

Predefined terms of customer support that can be quickly added to products in Salesforce. For example, you can create entitlement templates for phone or web support so users can easily add entitlements to products purchased by customers.

> **Note:** In Lightning Experience, the contact related list isn't available on Entitlements.

Entitlement Management

A collection of Salesforce features that help you provide the correct service levels to your customers. It includes:

- *Entitlements,* which let support agents determine whether a customer is eligible for support.
- *Entitlement processes,* which are timelines that include all the steps that your support team must complete to resolve support records like cases or work orders.
- *Service contracts,* which let you represent different kinds of customer support agreements like warranties, subscriptions, or maintenance agreements. You can restrict service contracts to cover specific products.
- *Experience access to entitlements,* which lets experience users view entitlements and service contracts and create support records from them.
- *Reporting on entitlement management,* which lets you track the way entitlements are used in your Salesforce org and whether service contract terms are being met.

Depending on your business needs, you may decide to use all of these features or just a few of them.

Service Contract

A customer support agreement between you and your customers. Service contracts in Salesforce can represent warranties, subscriptions, service level agreements (SLAs), and other types of customer support. View service contracts in the Service Contracts tab or on the Service Contracts related list on accounts and contacts.

Contract Line Item

Specific products covered by a service contract. View contract line items in the Contract Line Items related list on service contracts (not contracts!). You can only use contract line items if your org uses products.

> **Note:** Schedules aren't available for contract line items, and experience users can't access them.

Entitlement Process

A timeline that includes all the steps (milestones) that support agents must complete to resolve a support record. Each process includes the logic needed to determine how to enforce the correct service level for your customers. Entitlement processes come in two types: Case and Work Order.

Not all entitlements need processes. For example, a simple entitlement might just state that a customer is eligible for phone support 24/7. If you need to add time-dependent steps or service levels to that definition—for example, if you want a supervisor to be notified by email when a customer's case goes unresolved for two hours—you need an entitlement process.

Milestone

A required step in your entitlement process. Milestones are metrics that represent service levels to provide to each of your customers. Examples of milestones include First Response and Resolution Time on cases.

Milestone Action

A time-dependent workflow action that occurs on a milestone in an entitlement process. For example, you might add the following actions to a milestone:

- Send an email alert to certain users one hour before a first response milestone is scheduled to expire
- Update certain fields on a case one minute after a first response is completed

There are three types of milestone actions:

- *Success actions* are triggered when a milestone is completed
- *Warning actions* are triggered when a milestone is about to be violated
- *Violation actions* are triggered when a milestone is violated

You can automate tasks, email alerts, field updates, and outbound messages for each action type.

Entitlement Management Limits and Limitations

These limits and limitations apply to entitlements and their related features.

Limits

Limit	Details
Maximum entitlement processes per org	1,000
Maximum milestones per entitlement process	10
Maximum service contracts in a service contract hierarchy	10,000
Maximum contract line items in a contract line item hierarchy	10,000

Limitations

Experience Limitations

- Entitlements are only supported in experiences built using Salesforce Tabs + Visualforce and can't be added to Lightning Experience.

Entitlement Limitations

- Every entitlement must be associated with an account.
- You can't share entitlements. Entitlements inherit their parent account's sharing settings. To update an entitlement, you need Read access on the parent account.
- If you're using entitlement processes, manage customers' work orders and cases on separate entitlements. This is because an entitlement process only runs on records that match its type. For example, when a Case entitlement process is applied to an entitlement, the process only runs on cases associated with the entitlement. If a work order is also associated with the entitlement, the process won't run on the work order.
- Merge fields for entitlements on cases aren't supported. For example, if you add the `Entitlement Name` `{!Case.Entitlement}` merge field to an email template, the field is not populated on the template.

- Entitlement contacts don't have page layouts, search layouts, buttons, links, or record types.
- Entitlements don't automatically apply to cases created with Web-to-Case or Email-to-Case. For details on how to auto-add entitlements to these types of cases, see Automatically Add Entitlements to Cases from Web, Email, and Experiences.
- An email violation is triggered to the Queue if there is an email address associated with it. Queue members don't receive the violation email.

Milestone Limitations

- You can't add milestones to support records without using entitlement processes. Entitlement processes apply milestones to support records.
- Milestones aren't marked completed automatically. For details on how to auto-complete milestones on records that match unique criteria, see Auto-Complete Case Milestones.
- Actions on time-based milestones sometimes execute a few seconds before their target date. For example, if you set up a violation action to occur 0 minutes after the milestone is violated, the action can execute in the minute before the target date.
- After an entitlement process is activated, you can't delete its milestones or create milestone actions. But you can create versions of entitlement processes with different milestone settings and apply the new version to existing entitlements.
- By default, the tracker shows only one milestone countdown at a time. To view upcoming milestones, use the links in the tracker.
- The Case Milestone Status field isn't available in list views in Lightning Experience.
- The Milestone component and tracker doesn't appear in the Salesforce mobile app.
- Business hours on entitlement processes aren't supported in change sets. To transfer an entitlement process with business hours from one Salesforce org to another, use one of these approaches:
  - Create the entitlement process from scratch in the new org.
  - Use an alternative method to transfer the entitlement process, such as the Ant Migration Tool.
  - Remove the business hours from the entitlement process before adding it to a change set.
  - Case Milestone doesn't have system fields to identify who completes or changes the milestone.

Service Contract Limitations

- You can only use contract line items if your org uses the Product object.
- You can't create list views for contract line items.
- You can't share contract line items. Contract line items inherit their parent service contract's sharing settings. For example, users with the Read permission on service contracts inherit the Read permission on contract line items.
- In the Salesforce mobile app, contract line items can be edited and deleted but not created.
- You can't select a record type when creating contract line items. To change a line item's record type from the default type, manually update the record after it's created.

  Note: If you experience issues with the Root Service Contract field being blank, contact Salesforce for help.

Lightning Experience Limitations

- The Entitlements related list isn't available on contacts.
- The Entitlement Templates related list isn't available on products.
- The Contacts related list isn't available on entitlements.
- The Business Hours field isn't available on the Case Milestones related list.
- The Milestone Status Icon field on cases isn't available.
- In the Object Milestones related list on work orders, only the following fields are supported: Created By, Created Date, Last Modified By, Last Modified Date, Deleted, Object Milestone ID, Object Milestone Name, Stopped Time (Mins), Elapsed Time (Mins), Target Date, Completion Date, and Parent Object.

- The Status Icon field on service contracts isn't available.
- When you're adding multiple contract line items to a service contract, picklist fields on contract line items show all values in your org rather than only the values corresponding to the line item's record type. But selecting a value corresponding to a different record type results in an error. This issue doesn't occur when you edit a single line item.
- When you clone a case that's related to an entitlement record, the Entitlement Process Start Time carries over from the cloned case.

PLANNING YOUR IMPLEMENTATION

Planning for Entitlement Management

Entitlement management is highly customizable, which means you have many choices during setup. Before you begin the setup process, it's essential to choose an entitlement management model.

Choose What Determines Support Eligibility

You can set up entitlement management so customers are eligible for support based on one or several of the following types of records:

- *Accounts:* Any contact on the account is eligible for support.
- *Contacts:* Specific contacts are eligible for support.
- *Assets:* Specific assets (purchased products) are eligible for support.
- *Service contracts:* Customers are eligible for support based on a specific service contract.
- *Contract line items:* Specific products covered by a service contract are eligible for support.

Your approach depends on how detailed you want your support process to be. If you prefer to keep it simple, just have your support agents determine support eligibility based on accounts. Here's what this approach looks like:

Determining Whether a Customer is Entitled to Support

1 You create an entitlement that entitles Account A to phone support

2 A contact from Account A calls support with a question

3 The support agent looks up the account and sees it has an active phone support entitlement

4 The agent answers the question and, if needed, creates a case from the entitlement

Choose a Setup Model

There are three general ways to set up entitlement management. Once you've decided what should determine support eligibility, review the three models and select the one that best meets your business needs. You can always change which model you're using.

Entitlement model	What determines support eligibility	Use this model if
Entitlements only (simplest option)	Support agents determine whether a customer is eligible for support at the account, contact, or asset level.	- There's no need to manage your customers' entitlements as part of a service contract - Your entitlements don't have a renewal process - Entitlements aren't purchased by your customers; they're bundled with products (warranties) - Your customers' entitlements are short term and managed independently of each other
Entitlements + service contracts	Support agents determine whether a customer is eligible for support based on their service contract.	- Entitlements are purchased and managed separately from the products they cover and are part of a service contract - Your customers' entitlements are renewed at a contract level - You use Salesforce for customer support but not necessarily for service contract management
Entitlements + service contracts + contract line items (most complex option)	Support agents determine whether a customer is eligible for support based on the products covered in their service contract.	- You use Salesforce for customer support and to manage your customers' service contracts - Your support team manages service contract transactions, such as transfers, mergers, and renewals - Warranties, subscriptions, or other support products appear as line items on your sales orders and map to one or more entitlements - Entitlements are created and updated through an integration with your order management system

Regardless of the setup model you choose, you can enhance your support process with other entitlement management features. For example, you can:

- Create entitlement processes to enforce required, time-dependent steps in your support process
- Use entitlement versioning to create and maintain multiple versions of entitlement processes
- Add entitlements to experiences
- Report on entitlements

After you select a setup model, head to the invaluable Entitlement Management Setup Checklist.

Entitlement Management Setup Checklist

When you set up entitlement management, you decide which features to use. Use this checklist to confirm that you've set up entitlement management in a way that fits your support processes.

Step	Complete if...
☐ Read Planning for Entitlement Management	You're thinking about using entitlements in your org.
☐ Set Up Entitlements	You want customer support eligibility to be determined at the account or contact level.
☐ Enable Entitlements	You want to use entitlements in your org.
☐ Customize Entitlements	You want to control which fields users see on entitlements, and how and where users associate entitlements with other records.
☐ Set Up Entitlement and Asset Lookup Filters on Cases	You want to control which entitlements and assets users can link to a case.
☐ Give Users Access to Entitlement Management	You want to give users the appropriate user permissions, field access, and tab access.
☐ Set Up an Entitlement Template	You want to predefine the terms of support for specific products.
☐ Automatically Add Entitlements to Cases from Web, Email, and Experiences	You want the correct entitlement to be added automatically to cases created using Web-to-Case, Email-to-Case, or experiences.
☐ Set Up Milestones	You want to define required steps that support agents must complete to close a support record.
☐ Customize Milestone Page Layouts	You want to control which milestone-related fields users see.
☐ Enable Milestone Feed Items	You want automatic notifications to be added to the feed and the record owner's profile page when a milestone is completed or violated.
☐ Set Up the Milestone Tracker	You want your support team to be able to see a list of upcoming and completed

Step	Complete if...
	milestones and countdowns for active and overdue milestones.
☐ Limit User Updates to Milestones	You want to prevent users from updating milestones unless certain criteria are met.
☐ Create a Milestone	You want to define a required step in your support process.
☐ Auto-Complete Case Milestones	You want milestones to be automatically marked Completed on cases that match unique criteria.
☐ Set Up Entitlement Processes	You want to be able to apply the required steps in your support process to specific records.
☐ Create an Entitlement Process	You want to create a timeline that includes all of the steps that your support team must complete to resolve support records.
☐ Customize Entitlement Process Fields	You want to control which entitlement process fields users see.
☐ Add a Milestone to an Entitlement Process	You want to specify which required support steps occur, and when, on your timeline.
☐ Add a Milestone Action to an Entitlement Process	You want to define time-dependent workflow actions that occur at every step (milestone) in an entitlement process when the milestone is nearing violation, violated, or completed.
☐ Apply an Entitlement Process to an Entitlement	You want a specific entitlement's support records to follow the steps defined in your entitlement process.
☐ Create a New Version of an Entitlement Process	You want to update an entitlement process.
☐ Use a New Version of an Entitlement Process	You want to apply a new version of an entitlement process to new or existing entitlements.
☐ Set Up Service Contracts	You want customer support eligibility to be determined at the service contract level.
☐ Add Contract Line Items to Service Contracts	You want to be able to limit a service contract to cover specific products.
☐ Set Up Entitlement Management in Experiences	You want customers or partners to be able to view their entitlements and service contracts and create support records from them.
☐ Report on Entitlements	You want to view and share data on entitlements and service contracts.
☐ Give your support team entitlement management guidelines.	You want your support team to understand: • How to verify that a customer is entitled to support • How to link cases or work orders to entitlements • How entitlement processes affect the way they resolve cases or work orders

SETTING UP ENTITLEMENT MANAGEMENT

Set Up Entitlements

Entitlements are units of customer support in Salesforce, such as "phone support" or "web support". Set up entitlements in your Salesforce org to help support agents determine whether a customer is eligible for support.

1. Enable Entitlements

   Enable entitlements in your Salesforce org to help support agents deliver the correct service level to your customers.

2. Customize Entitlements

   Customize entitlement fields and page layouts based on your business needs and how your agents work.

3. Set Up Entitlement and Asset Lookup Filters on Cases

   Set up lookup filters on entitlement-related case fields to restrict the entitlements that users can select on a case.

4. Give Users Access to Entitlement Management

   After you set up entitlement management, make sure that users have the appropriate user permissions, field access, and tab access.

5. Set Up an Entitlement Template

   Entitlement templates let you predefine terms of support that users can add to products.

6. Automatically Add Entitlements to Cases from Web, Email, and Experiences

   Entitlements don't automatically apply to cases created using Web-to-Case, Email-to-Case, or experience. However, you can add entitlements to these features using Apex code.

Enable Entitlements

Enable entitlements in your Salesforce org to help support agents deliver the correct service level to your customers.

> 📝 **Note:** Only users with a standard System Administrator profile can enable entitlements.

1. From Setup, enter `Entitlement Settings` in the `Quick Find` box, then select **Entitlement Settings**.

2. Select `Enable Entitlement Management`.

3. Click **Save**. This takes you to a page where you can customize entitlement management settings. You'll come back to those settings later on in the entitlement management setup process.

Customize Entitlements

Customize entitlement fields and page layouts based on your business needs and how your agents work.

1. **Customize entitlements fields.**

   This customization lets you control what information users add to entitlements.

   💡 **Tip:** Create custom entitlement fields that are specific to your industry or your support processes. For example:

   - Customize the values for the `Type` field to match the types of entitlements your team provides or sells, like online support or online training.

   - If your business charges for entitlement renewals, create a currency field on entitlements named `Cost to Renew`.

2. **Customize entitlement page layouts.**

   This customization lets you specify which fields and related lists users see on entitlements. Consider making the following customizations:

   - Add the `Status Icon` field so users can easily see whether the entitlement is active, expired, or inactive.

   - Add the Cases, Contacts, and Work Orders related lists so users can:

     - View cases, contacts, and work orders associated with entitlements

     - Create cases or work orders automatically associated with the correct entitlements

     - Add contacts to entitlements

   - Add the Work Orders Per Entitlement and Remaining Work Orders fields so users can track how many work orders were agreed to and how many are still available.

   📝 **Note:** In Lightning Experience, the Entitlement Templates related list isn't available on product page layouts.

3. **Set field history tracking on entitlements.**

   This customization lets you see when field values were changed. Changes are listed in the Entitlement History related list on entitlements. From the object management settings for entitlements, go to the fields section and click **Set History Tracking**.

4. **Customize other objects' page layouts.**

   - Add the `Entitlement Name` lookup field to case and work order page layouts. This field lets users add entitlements to cases or work orders.

     🛑 **Important:** To let a user create cases from entitlements or change a case's assigned entitlement, make the `Entitlement Name` field on cases editable for their profile.

   - Add the Entitlements related list to other objects' page layouts:

Add the Entitlements related list to this object's page layouts...	So users can view and create entitlements when...
Accounts	Any contact on the account is eligible for support
Contacts	Specific contacts are eligible for support
Assets	Specific assets (purchased products) are eligible for support

> 📝 **Note:** In Lightning Experience, the Entitlements related list isn't available on Contacts.

5. Make the Entitlements tab visible in Salesforce and any custom apps.

The Entitlements tab is where users create and edit entitlements. Add the tab to an app or instruct your users to add it to an existing tab set in Salesforce. To see the Entitlements tab, users need the "Read" permission on entitlements.

Set Up Entitlement and Asset Lookup Filters on Cases

Set up lookup filters on entitlement-related case fields to restrict the entitlements that users can select on a case.

For example, when experience users create a case and use the lookup on the `Entitlement Name` field, you can set up lookup filters so they can choose only entitlements registered to their account or contact.

1. From Setup, enter `Entitlement Settings` in the `Quick Find` box, then select **Entitlement Settings**.

2. Choose the item(s) you'd like returned in the lookup fields.

Lookup Field on Cases	Click...	To Return...
Asset	`Same account on the case`	Assets registered to the account on the case.
		💡 **Tip:** If you want the lookup field to return all assets that share an account with the case, select only this option.
	`Same contact on the case`	Assets registered to the contact on the case.
	`Entitlements on the case's account`	Assets associated with entitlements that belong to the case's account.
	`Entitlements on the case's contact`	Assets associated with entitlements related to the case's contact.
		📝 **Note:** In Lightning Experience, the Entitlements related list isn't available on Contacts.
Entitlement	`Active status`	Entitlements with an Active Status.

Lookup Field on Cases	Click...	To Return...
	`Same account on the case`	Entitlements associated with the account on the case.
	`Same asset on the case`	Entitlements associated with the asset on the case.
	`Same contact on the case`	Entitlements associated with the contact on the case.

Choosing multiple items acts as an AND function, so the more items you select, the more it restricts the options returned. For example, choosing `Same account on the case` and `Same contact on the case` means the `Asset` lookup field only returns assets registered to both the account and the contact on the case.

> 💡 **Tip:** Choose items that match the way your support agents verify support eligibility. For example, choose the account-related items if your support agents verify support eligibility based on accounts.

3. Click **Save**.

> 📝 **Note:** Equivalent lookup filters aren't available for work orders.

Give Users Access to Entitlement Management

After you set up entitlement management, make sure that users have the appropriate user permissions, field access, and tab access.

1. Assign entitlement management permissions to users.

Users Who Will	Need These Permissions	Permissions Are Auto-Enabled on These Standard Profiles
Set up entitlement management, including milestones, entitlement processes, and entitlement templates	"Manage Entitlements"	System Administrator
Provide entitlement management to an experience	"Customize Application" AND "Create and Set Up Experiences"	System Administrator
Create or update custom report types that include entitlement management	"Manage Custom Report Types"	System Administrator
Create and run reports based on entitlement management custom report types	"Create and Customize Reports"	Standard User, Solution Manager, Contract Manager,

Users Who Will	Need These Permissions	Permissions Are Auto-Enabled on These Standard Profiles
		Marketing User, and System Administrator
Create cases with entitlements	"Create" on cases AND "Read" on entitlements	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Change a case's entitlement	"Edit" on cases AND "Read" on entitlements	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Create work orders with entitlements	"Create" on work orders AND "Read" on entitlements	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Change a work order's entitlement	"Edit" on work orders AND "Read" on entitlements	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Verify or view entitlements	"Read" on entitlements	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Create entitlements	"Create" on entitlements	None: enable the permission in a permission set or custom profile
Change entitlements	"Edit" on entitlements	None: enable the permission in a permission set or custom profile
View entitlement contacts	"Read" on entitlement contacts	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Change entitlement contacts	"Create" on entitlement contacts AND "Delete" on entitlement contacts	None: enable the permissions in a permission set or custom profile
Verify or view service contracts	"Read" on service contracts	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Create service contracts	"Create" on service contracts	None: enable the permission in a permission set or custom profile
Change service contracts	"Edit" on service contracts	None: enable the permission in a permission set or custom profile

Users Who Will	Need These Permissions	Permissions Are Auto-Enabled on These Standard Profiles
Verify or view contract line items	"Read" on contract line items	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Add contract line items to service contracts	"Edit" on service contracts AND "Create" on contract line items and "Read" on products and price books	None: enable the permissions in a permission set or custom profile
Change contract line items on service contracts	"Edit" on service contracts AND "Edit" on contract line items and "Read" on products and price books	None: enable the permissions in a permission set or custom profile

💡 **Tip:** If a standard profile doesn't include a certain user permission, you can create a permission set and enable the permission in it. Or, clone the standard profile and enable the permission in the custom profile.

2. Set field-level security.

Choose which entitlement management fields users can view and edit. Field-level security settings let you specify users' access to fields in several areas of the user interfaces:

- Detail and edit pages
- Related lists
- List views
- Reports
- Search results
- Email and mail merge templates
- Experiences

🛑 **Important:** To let a user create cases from entitlements or change a case's assigned entitlement, make the `Entitlement Name` field on cases editable for their profile.

SEE ALSO:

Salesforce Help: Field Permissions

Set Up an Entitlement Template

Entitlement templates let you predefine terms of support that users can add to products.

You can create entitlement templates for specific products so support agents can quickly add the right entitlement whenever a customer purchases the product. For example, you can create entitlement templates for web or phone support so agents can easily add entitlements to products offered to customers.

📝 **Note:** In Lightning Experience, the contact related list isn't available on Entitlements.

Purchased or installed products are represented in Salesforce as assets. That means:

- A *product* (for example, "Laser Scanner") is linked to an entitlement template
- A corresponding *asset* (for example, the laser scanner purchased by ABC Labs) is linked to an entitlement that was created from the entitlement template

📝 **Note:** Entitlement templates are only available if entitlements and products are enabled in your org.

💡 **Tip:** The Entitlement Management Trailhead module introduces you to common terms and walks you through the process of creating an entitlement template. And, it's fun! To get started, see Entitlement Management.

1. Add the Entitlement Templates related list to product page layouts.

2. Optionally, add the `Type` and `Business Hours` fields to the Entitlement Templates related list. This lets users view the type of entitlement, such as Web or phone support, and any business hours that apply to the entitlement.

3. Create an entitlement template.

   a. From Setup, enter `Templates` in the Quick Find box, then select **Entitlement Templates**.

   b. Click **New Template**.

   c. Enter any details:

Field	Description
Entitlement Template Name	The name of the entitlement template.
	Use a descriptive name, like `Phone Support`. This helps users better understand entitlement templates when they see them on related lists for products.
Term (Days)	The number of days the entitlement is in effect.
	For example, if you want the entitlement template to entitle all customers who purchase this product to 90 days of phone support, enter `90`.
Entitlement Process	The entitlement process associated with the entitlement.
Per Incident	Lets you limit the number of cases the entitlement supports. The admin determines whether this field is visible.
Cases Per Entitlement	The total number of cases the entitlement supports.
	This field is only available if `Per Incident` is selected.

Field	Description
Business Hours	The entitlement's supported business hours.
Type	The type of entitlement, such as Web or phone support. Admins can customize this field's values.

4. Click **Save**.

5. Add the entitlement template to a product.

   a. Go to the product detail page.

   b. Click **Add Entitlement Template** on the Entitlement Templates related list.

   c. Select the entitlement template.

   d. Click **Insert Selected**.

   e. Click **Done**.

Now when a user creates an asset and links it to that product, the Entitlements related list on the asset includes an entitlement created from the entitlement template. That way, support agents responding to a call about the asset can quickly see what kind of support the customer is entitled to receive.

Automatically Add Entitlements to Cases from Web, Email, and Experiences

Entitlements don't automatically apply to cases created using Web-to-Case, Email-to-Case, or experience. However, you can add entitlements to these features using Apex code.

When a case is created via Web-to-Case, Email-to-Case, or an experience, it isn't automatically associated with an entitlement. When a case's `Entitlement` field is empty, this sample trigger checks whether the case contact has an active entitlement. If the contact has an active entitlement, the entitlement is added to the case. If the contact doesn't have an active entitlement, the trigger then checks whether the case account has an active entitlement. If the case account has an active entitlement, the entitlement is added to the case. The trigger helps ensure that cases are resolved according to your customer support agreements.

1. From Setup, enter `Case Triggers` in the Quick Find box, then select **Case Triggers**.

2. Click **New**.

3. Copy the text below and paste it in the text field.

4. Click **Save**.

👁 Example:

```
trigger DefaultEntitlement on Case (Before Insert, Before
Update) {
 Set<Id> contactIds = new Set<Id>();
 Set<Id> acctIds = new Set<Id>();
 for (Case c : Trigger.new) {
  contactIds.add(c.ContactId);
  acctIds.add(c.AccountId);
 }
```

EDITIONS

Available in both: Salesforce Classic and Lightning Experience

Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

USER PERMISSIONS

To define Apex triggers:
- Author Apex

```
    List <EntitlementContact> entlContacts =
                [Select e.EntitlementId,e.ContactId,e.Entitlement.AssetId
                From EntitlementContact e
                Where e.ContactId in :contactIds
                And e.Entitlement.EndDate >= Today
                And e.Entitlement.StartDate <= Today];
 if(entlContacts.isEmpty()==false){
  for(Case c : Trigger.new){
   if(c.EntitlementId == null && c.ContactId != null){
    for(EntitlementContact ec:entlContacts){
     if(ec.ContactId==c.ContactId){
      c.EntitlementId = ec.EntitlementId;
      if(c.AssetId==null && ec.Entitlement.AssetId!=null)
       c.AssetId=ec.Entitlement.AssetId;
      break;
     }
    }
   }
  }
 } else{
  List <Entitlement> entls = [Select e.StartDate, e.Id, e.EndDate,
    e.AccountId, e.AssetId
    From Entitlement e
    Where e.AccountId in :acctIds And e.EndDate >= Today
    And e.StartDate <= Today];
  if(entls.isEmpty()==false){
   for(Case c : Trigger.new){
    if(c.EntitlementId == null && c.AccountId != null){
     for(Entitlement e:entls){
      if(e.AccountId==c.AccountId){
       c.EntitlementId = e.Id;
       if(c.AssetId==null && e.AssetId!=null)
        c.AssetId=e.AssetId;
       break;
      }
     }
    }
   }
  }
 }
}
```

Set Up Service Contracts

Service contracts are agreements between you and your customers for a type of customer support. Service contracts can represent different kinds of customer support, such as subscriptions or service level agreements (SLAs).

📝 **Note:** Entitlements must be enabled in your org for you to set up service contracts.

From the object management settings for service contracts:

1. **Customize service contract fields.**

   This lets you control what information users add to service contracts. You can create custom service contract fields that are specific to your industry or support process.

2. **Customize service contract page layouts.**

   This lets you specify which fields and related lists users see on service contracts. Consider making the following customizations:

   - Add the `Status Icon` field so users can easily see whether the service contract is active, expired, or inactive.

   - To let users make one service contract the parent of another, add the `Parent Service Contract` field and Child Service Contracts related list. You can also add the read-only `Root Service Contract` field so users can see the top-level service contract in a service contract hierarchy. A service contract hierarchy can contain up to 10,000 service contracts.

3. **Set field-level security on service contract fields.**

   This lets you choose which service contract fields users can access.

4. **Set field history tracking on service contracts.**

   This lets you see when field values were changed. Changes are listed in the Service Contract History related list on service contracts. From the object management settings for service contracts, go to the fields section, and then click **Set History Tracking**.

5. **Make the Service Contracts tab visible in Salesforce and any custom apps.**

   The Service Contracts tab is where users create and edit service contracts and contract line items. Add the tab to an app or instruct your users to add it to an existing tab set in Salesforce. Users need the "Read" permission on service contracts to see the Service Contracts tab.

6. **Add the Service Contracts related list to account and contact page layouts.**

   This lets users create, update, and verify service contracts from accounts and contacts.

Add Contract Line Items to Service Contracts

Set up contract line items to be able to specify which products a service contract covers. Contract line items only display to users on the Contract Line Items related list on service contracts (not on contracts!). You can only use contract line items if your Salesforce org uses products.

📝 **Note:** Entitlements must be enabled in your org for you to set up contract line items.

From the object management settings for contract line items:

1. **Customize contract line item fields.**

   This lets you control what information users add to contract line items. You can create custom contract line item fields that are specific to your industry or support process.

2. **Customize contract line item page layouts.**

   This lets you specify which fields and related lists users see on contract line items. Consider making the following customizations:

   - Add the `Status Icon` field so users can easily see whether the line item is active, expired, or inactive.

   - To let users make one line item the parent of another, add the `Parent Contract Line Item` field and Child Contract Line Items related list. You can also add the read-only `Root Contract Line Item` field, which lists the top-level line item in a contract line item hierarchy. A contract line item hierarchy can contain up to 10,000 line items.

3. **Customize other objects' page layouts.**

   This lets you choose how users can associate contract line items with other records. Consider making the following customizations:

   - (Required) Add the Contract Line Items related list to service contract page layouts. This lets users create, edit, and delete contract line items from service contracts.

   - Add the Contract Line Items related list to asset layouts. This lets users view and change associations between assets and contract line items.

   - Add the `Contract Line Item` lookup field to entitlement page layouts. This lets users associate a line item with a particular entitlement.

4. **Set field-level security on contract line items.**

   This lets you choose which contract line item fields users can access.

5. **Set field history tracking on contract line items.**

   This lets you see when field values were changed. Changes are listed in the Contract Line Item History related list on contract line items. From the object management settings for contract line items, go to the fields section, and then click **Set History Tracking**.

📝 **Note:** Schedules aren't available for contract line items, and experience users can't access them.

EDITIONS

Available in both: Salesforce Classic and Lightning Experience

Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

USER PERMISSIONS

To set up service contracts and contract line items with entitlements:

- **Manage Entitlements**

  AND

  Customize Application

Set Up Entitlement Management in Experiences

Add entitlement management to your experiences to let customers or partners view their entitlements and service contracts.

Follow these steps to expose entitlements or service contracts in an experience. These objects are supported only in experiences built using Salesforce Tabs + Visualforce, and can't be added to Lightning Experiences.

1. Update user profiles.

   a. Clone the Customer Experience User, Customer Experience Plus User, or Partner Experience User profiles and enable the "Read" permission on entitlements and/or service contracts.

      ✏️ Note: Remember to click **Edit Profiles** at the bottom of the detail page to activate the new profiles.

   b. Optionally, on the profiles of delegated experience moderators, enable the "Create" and "Delete" permissions on entitlement contacts. This lets moderators update entitlement contacts.

   c. Verify that the tab visibility for the Entitlements and/or Service Contracts tabs is Default On.

2. Add the Entitlements and/or Service Contracts tabs to the experience.

3. Add the `Entitlement Name` field to case and work order page layouts assigned to experience users.

   This lets users add entitlements to cases and work orders.

   ✏️ Note: To avoid exposing your internal support processes, we recommend not adding the following fields to case and work order page layouts for experience users:

   - `Entitlement Process Start Time`
   - `Entitlement Process End Time`
   - `Stopped`
   - `Stopped Since`

4. Optionally, add the Entitlements related list to account and contact page layouts assigned to experience moderators. This lets moderators create cases automatically associated with the right entitlements.

EDITIONS

Available in: Salesforce Classic

Experiences are available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

Entitlement Management is available in **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

USER PERMISSIONS

To create, customize, or activate a experience:
- Create and Set Up experiences AND is a member of the experience they're updating

To set up entitlement management:
- Manage Entitlements

To assign user licenses:
- Manage Internal Users

Report on Entitlements

Use custom report types to define report criteria that users can use to run and create reports on entitlements, service contracts, and contract line items.

After you set up entitlement management, your Salesforce org automatically includes the following custom report types:

Custom Report Type	Description	Report Type Location
Accounts with entitlements with contacts	Lists accounts with entitlements that include contacts (named callers).	Accounts & Contacts
Service contracts with contract line items	Lists service contracts with contract line items (products).	Customer Support Reports
Service contracts with entitlements	Lists service contracts with entitlements.	Customer Support Reports
Cases with milestones	Lists cases with milestones. This report type can't be customized.	Customer Support Reports

1. From Setup, enter `Report Types` in the Quick Find box, then select **Report Types**.

2. From the All Custom Report Types page, you can:

   - Define a new custom report type. You can't select entitlements as a primary object.

   - Update a custom report type's name, description, report type category, and deployment status.

   - Delete a custom report type.

     🛑 **Important:** When you delete a custom report type, all the data stored in the custom report type is deleted and cannot be restored from the Recycle Bin.

💡 **Tip:** If you want to view a list of work orders with milestones in your org, use the Object Milestones custom report type to create a work order report.

ENFORCING SERVICE LEVELS

Set Up Milestones

Milestones represent required steps in your support management process, like first response times. Set up and customize milestones in your org so they can be added to entitlement processes and applied to support records like cases and work orders.

Before setting up milestones, make sure that you understand where milestones can appear. See Where Can I View Milestones?

1. Customize Milestone Page Layouts

   Customize your page layouts for milestones to help support agents and supervisors track support progress.

2. Enable Milestone Feed Items

   Help support agents monitor support activity by enabling milestone feed items. This option posts a notification to the feed and the record owner's profile page when a milestone is completed or violated.

3. Set Up the Milestone Tracker

   The milestone tracker gives support agents a complete view of upcoming and completed milestones, and displays countdowns for active and overdue milestones. Add it to the case feed, work order feed, a custom page, or the Service Console.

4. Limit User Updates to Milestones

   Add validation rules to milestones to prevent users from updating milestones unless certain criteria are met.

5. Create a Milestone

   Milestones represent required steps in your support process, such as case resolution time and first response time. You create master milestones in your org and then add them to entitlement processes to enforce different service levels on support records, like cases and work orders.

6. Auto-Complete Case Milestones

   Create an Apex trigger that automatically marks milestones Completed on cases that match unique criteria. In your trigger, define which events and related case criteria must be satisfied for a milestone to be marked Completed. You can implement a similar trigger to auto-complete work order milestones.

Customize Milestone Page Layouts

Customize your page layouts for milestones to help support agents and supervisors track support progress.

1. Add any of the following fields to case and object milestone detail pages.

   Use Setup in Salesforce Classic:

   - To edit case milestone detail page layouts, from Setup, enter `Case Milestones` in the Quick Find box, then click **Page Layouts** under Case Milestones.

   - To edit object milestone detail page layouts (which apply to work order milestones), from Setup, enter `Object Milestones` in the Quick Find box, then click **Page Layouts** under Object Milestones.

Field	Description
Actual Elapsed Time	The amount of time that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time) **Note:** If you want to be able to display this field, **Enable stopped time and actual elapsed time** must be selected on the Entitlement Settings page.
Completed	Icon that indicates milestone completion.
Completion Date	The date and time the milestone was completed.
Elapsed Time	The time it took to complete a milestone. Automatically calculated to include any business hours on the support record. Elapsed time is calculated only after the Completion Date field is populated.
Entitlement Process	The entitlement process that is being used for the record. Entitlement processes are optional.
Start Date	The date and time that the milestone tracking started.
Stopped Time	How long an agent has been blocked from completing a milestone. For example, an agent might wait for a customer to reply with more information. **Note:** **Enable stopped time and actual elapsed time** must be selected on the Entitlement Settings page. Then give your agents access to the field through field-level security.

Field	Description
Target Date	The date and time to complete the milestone.
Target Response	The time to complete the milestone. Automatically calculated to include any business hours on the support record.
Time Remaining	The time that remains before a milestone violation. Automatically calculated to include any business hours on the support record.
Time Since Target	The time that has elapsed since a milestone violation. Automatically calculated to include any business hours on the support record.
Violation	Icon that indicates a milestone violation.

2. Add milestone elements to case and work order page layouts.

Use Setup in Salesforce Classic or Lightning Experience.

a. Add milestone fields.

Field	Description
Milestone Status	The milestone's status.
Milestone Status Icon	An icon that corresponds to the milestone status: • ✔ Compliant • 🛑 Open Violation • ⚠ Closed Violation 📝 Note: In Lightning Experience, the Milestone Status Icon field on cases isn't available.
Entitlement Process Start Time	The time the record enters the entitlement process.
Entitlement Process End Time	The time the record exits the entitlement process.

📝 Note: Case Milestone Status isn't available in list views in Lightning Experience.

b. Add the Case Milestones or Object Milestones related list to display the record's milestones.

In Lightning Experience, the Case Milestones related list doesn't support the Business Hours field. Only certain fields in the Object Milestones related list are supported.

Enable Milestone Feed Items

Help support agents monitor support activity by enabling milestone feed items. This option posts a notification to the feed and the record owner's profile page when a milestone is completed or violated.

🛇 **Important:**

- Chatter and entitlements must be enabled in your org.
- Enabling milestone feed items doesn't create feed items for milestones that have already been completed or violated.
- If you add entitlement management to an experience, enabling milestone feed items also makes feed items visible to experience users.

1. From Setup, enter `Entitlement Settings` in the Quick Find box, then select **Entitlement Settings**.
2. Select **Enable milestone feed items**. This enables feed items for both cases and work orders.

When milestones feed items are posted, agents can click the milestone name to view its details.

Set Up the Milestone Tracker

The milestone tracker gives support agents a complete view of upcoming and completed milestones, and displays countdowns for active and overdue milestones. Add it to the case feed, work order feed, a custom page, or the Service Console.

Often, support agents' performance is measured by how often they meet milestones. The milestone tracker helps agents be prepared for support deadlines by showing them:

- The time remaining until an active milestone reaches its Target Date
- The time passed since an overdue milestone's Target Date
- A list of upcoming milestones
- A list of completed milestones

When a milestone is in progress, the milestone is represented by a green circle. The circle winds down clockwise as time elapses. The remaining time is shown in the center of the circle. When the time to complete the milestone expires, the circle turns red. The amount of time that the milestone is overdue is shown in the center of the circle. If more than 24 hours remain on a milestone, the countdown displays in days (for example, 1d). When fewer than 24 hours remain, the countdown format switches to hours/minutes/seconds.

In Salesforce Classic

In Lightning Experience

1. Expose the milestone tracker to support agents.

   In Salesforce Classic, you can:

   - Add it to the case feed. If you plan to use milestones on work orders, follow the same steps to add the tracker to the work order feed.

     a. From the object management settings for cases, go to Page Layouts.

     b. In the Case Page Layouts section, click **Edit**, and then click **Feed View** in the page layout editor.

     c. In the Other Tools and Components section, select the **Milestone Tracker** and specify where on the page you want it to appear.

     d. Click **Save**.

   - Add it to a custom Visualforce page using the `<apex:milestoneTracker>` component.

   - Add it as a component to the Service Console.

   In Lightning Experience, go to Lightning App Builder and add the Milestones component. See Create and Configure Lightning Experience Record Pages . In the Lightning App Builder, you can opt to hide the Mark Completed link from your agents.

2. Set how the milestone tracker displays time remaining or time overdue on milestones.

   Note: By default, the tracker displays actual hours.

   To make it display time remaining or time overdue in business hours, follow these steps.

   a. From Setup, enter `Entitlement Settings` in the Quick Find box, then select **Entitlement Settings**.

   b. In the Milestone Tracker section, deselect **Show the time remaining in actual hours, not business hours**.

   c. Click **Save**.

   Example: Suppose an active milestone's business hours are 9 a.m. to 5 p.m. Right now, it's 4:30 p.m. and the milestone's Target Date is 11:00 a.m. tomorrow.

   - If the milestone tracker shows the remaining time in business hours (the default setting), it displays a countdown of 2 hours and 30 minutes (4:30 to 5 p.m. today and 9 to 11 a.m. tomorrow).

   - If the milestone tracker shows the remaining time in actual hours, it displays a countdown of 18 hours and 30 minutes (4:30 p.m. today to 11:00 a.m. tomorrow).

Limit User Updates to Milestones

Add validation rules to milestones to prevent users from updating milestones unless certain criteria are met.

📝 **Note:** To create validations rules, use Setup in Salesforce Classic. Don't worry, your validation rules still apply in Lightning Experience.

1. From the object management settings for case milestones, go to Validation Rules.

2. Click **New**.

3. Enter the rule details.

4. Save your changes.

👁 **Example:** This validation rule prevents users from selecting milestone completion dates that are earlier than the case creation date. You can create a similar validation rule for work orders from the object management settings for Object Milestones in Setup.

Field	Value
Rule Name	`milestone_completion_date`
Description	`A milestone's completion date must be later than the case creation date.`
Error Condition Formula	`CompletionDate < Case.CreatedDate`
Error Message	`Error: The milestone completion date must be later than the case creation date.`
Error Location	`Top of Page`

Create a Milestone

Milestones represent required steps in your support process, such as case resolution time and first response time. You create master milestones in your org and then add them to entitlement processes to enforce different service levels on support records, like cases and work orders.

> 💡 **Tip:** The Entitlement Management Trailhead module introduces you to common terms and walks you through the process of creating milestones. And it's fun! To get started, see Entitlement Management.

1. From Setup, enter `Milestones` in the Quick Find box, then select **Milestones** under Entitlement Management.

2. Click **New Milestone**.

3. Enter a name and description. Try to name milestones after common support tasks, like "First Response Time" or "Resolution Time." Descriptive names help users understand milestones when they see them on cases, work orders, or entitlement processes.

4. Select a recurrence type.

Recurrence Type	Description	Example
No Recurrence	The milestone occurs only once on the record.	First Response Resolution Time
Independent	The milestone occurs whenever the milestone criteria are met on the record.	Response Time
Sequential	The milestone occurs on repeat whenever the milestone criteria are met on the record.	Customer Contact Made

5. Click **Save**.

You can't apply a milestone to a record by itself. It must be part of an entitlement process. So after you create your milestone, add it to an entitlement process.

> 💡 **Tip:** You can add validation rules to a milestone so that users can update a milestone only if it meets specific standards. For details, see Limit User Updates to Milestones.

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Auto-Complete Case Milestones

Create an Apex trigger that automatically marks milestones Completed on cases that match unique criteria. In your trigger, define which events and related case criteria must be satisfied for a milestone to be marked Completed. You can implement a similar trigger to auto-complete work order milestones.

> 💡 **Tip:** In Lightning Experience, agents can click the **Mark Completed** link in the Milestones component to mark a milestone completed. It's not automation, but it is easy. For more information, see Set Up the Milestone Tracker.

The following triggers mark specific types of milestones Completed when the case they are on meets unique criteria. We've also provided a milestone utility Apex class and accompanying unit tests. Define the milestone utility class before you use any of the triggers.

Milestone Utility Apex Class

Apex classes reduce the size of your triggers and make it easier to reuse and maintain Apex code. To define this Apex class in your org:

1. From Setup, enter `Apex Classes` in the Quick Find box, then click **Apex Classes**.

2. Click **New**.

3. Copy the class text and paste it into the text field.

4. Click **Save**.

```
public class MilestoneUtils {
    public static void completeMilestone(List<Id> caseIds,
            String milestoneName, DateTime complDate) {
    List<CaseMilestone> cmsToUpdate = [select Id, completionDate
            from CaseMilestone cm
            where caseId in :caseIds and cm.MilestoneType.Name=:milestoneName
            and completionDate = null limit 1];
    if (cmsToUpdate.isEmpty() == false){
        for (CaseMilestone cm : cmsToUpdate){
            cm.completionDate = complDate;
            }
        update cmsToUpdate;
        }
    }
}
```

Apex Class Unit Test

You can set up Apex unit tests in the developer console to scan your code for any issues.

```
/**
 * This class contains unit tests for validating the behavior of Apex classes
 * and triggers.
 *
 * Unit tests are class methods that verify whether a particular piece
 * of code is working properly. Unit test methods take no arguments,
 * commit no data to the database, and are flagged with the testMethod
 * keyword in the method definition.
 *
 * All test methods in an organization are executed whenever Apex code is deployed
 * to a production organization to confirm correctness, ensure code
```

```
* coverage, and prevent regressions. All Apex classes are
* required to have at least 75% code coverage in order to be deployed
* to a production organization. In addition, all triggers must have some code coverage.
*
* The @isTest class annotation indicates this class only contains test
* methods. Classes defined with the @isTest annotation do not count against
* the organization size limit for all Apex scripts.
*
* See the Apex Language Reference for more information about Testing and Code Coverage.
*/
@isTest
private class MilestoneTest {

static testMethod void TestCompleteMilestoneCase(){

List<Account> acts = new List<Account>();
Account myAcc = new Account(Name='TestAct', phone='1001231234');
acts.add(myAcc);

Account busAcc = new Account(Name = 'TestForMS', phone='4567890999');
acts.add(busAcc);
insert acts;
Contact cont = new Contact(FirstName = 'Test', LastName = 'LastName', phone='4567890999',
 accountid = busAcc.id);
insert(cont);

Id contactId = cont.Id;

Entitlement entl = new Entitlement(Name='TestEntitlement', AccountId=busAcc.Id);
insert entl;

String entlId;
if (entl != null)
entlId = entl.Id;

List<Case> cases = new List<Case>{};
if (entlId != null){
Case c = new Case(Subject = 'Test Case with Entitlement ',
EntitlementId = entlId, ContactId = contactId);
cases.add(c);
}
if (cases.isEmpty()==false){
insert cases;
List<Id> caseIds = new List<Id>();
for (Case cL : cases){
caseIds.add(cL.Id);
}
milestoneUtils.completeMilestone(caseIds, 'First Response', System.now());
}
}

static testMethod void testCompleteMilestoneViaCase(){

List<Account> acts = new List<Account>();
```

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```
Account myAcc = new Account(Name='TestAct', phone='1001231234');
acts.add(myAcc);

Account busAcc = new Account(Name = 'TestForMS', phone='4567890999');
acts.add(busAcc);
insert acts;
Contact cont = new Contact(FirstName = 'Test', LastName = 'LastName', phone='4567890999',
 accountid = busAcc.id);
insert(cont);

Id contactId = cont.Id;

Entitlement entl = new Entitlement(Name='TestEntitlement', AccountId=busAcc.Id);
insert entl;

String entlId;
if (entl != null)
entlId = entl.Id;

List<Case> cases = new List<Case>{};
for(Integer i = 0; i < 1; i++){
Case c = new Case(Subject = 'Test Case ' + i);
cases.add(c);
if (entlId != null){
c = new Case(Subject = 'Test Case with Entitlement ' + i,
EntitlementId = entlId);
cases.add(c);
}
}
}
}
```

Sample Trigger 1

You can create a milestone named Resolution Time that requires cases to be closed within a certain length of time. It's a great way to enforce case resolution terms in SLAs. This sample case trigger marks each Resolution Time milestone Completed when its case is closed. This way, the support agent doesn't have to manually mark the milestone completed after closing the case.

📝 Note: This trigger references the milestone utility test class, so be sure to define the test class first.

To define this trigger in your org:

1. From Setup, enter `Case Triggers` in the Quick Find box, then click **Case Triggers**.

2. Click **New**.

3. Copy the trigger text and paste it into the text field.

4. Click**Save**.

```
trigger CompleteResolutionTimeMilestone on Case (after update) {
    if (UserInfo.getUserType() == 'Standard'){
        DateTime completionDate = System.now();
            List<Id> updateCases = new List<Id>();
            for (Case c : Trigger.new){
                    if (((c.isClosed == true)||(c.Status == 'Closed'))&&((c.SlaStartDate

                        <= completionDate)&&(c.SlaExitDate == null)))
```

```
            updateCases.add(c.Id);
          }
      if (updateCases.isEmpty() == false)
         milestoneUtils.completeMilestone(updateCases, 'Resolution Time', completionDate);


     }
}
```

Sample Trigger 2

You can create a milestone named First Response that requires agents to get in touch with a case contact within X minutes or hours of the case's creation. It's a nice way to ensure that your support team is communicating with case contacts as soon as possible. This sample email trigger marks a First Response milestone Completed when an email is sent to the case contact. That way, the support agent doesn't have to manually mark the First Response milestone Completed after they email the case contact.

📝 Note: This trigger references the milestone utility test class, so be sure to define the test class first.

To define this trigger in your org:

1. From Setup, enter *Email Triggers* in the Quick Find box, then click **Email Triggers**.

2. Click **New**.

3. Copy the trigger text and paste it into the text field.

4. Click**Save**.

```
trigger CompleteFirstResponseEmail on EmailMessage (after insert) {
    if (UserInfo.getUserType() == 'Standard'){
        DateTime completionDate = System.now();
        Map<Id, String> emIds = new Map<Id, String>();
        for (EmailMessage em : Trigger.new){
            if(em.Incoming == false)
                emIds.put(em.ParentId, em.ToAddress);
        }
        if (emIds.isEmpty() == false){
            Set <Id> emCaseIds = new Set<Id>();
            emCaseIds = emIds.keySet();
                List<Case> caseList = [Select c.Id, c.ContactId, c.Contact.Email,
                    c.OwnerId, c.Status,
                    c.EntitlementId,
                    c.SlaStartDate, c.SlaExitDate
                    From Case c where c.Id IN :emCaseIds];
            if (caseList.isEmpty()==false){
                    List<Id> updateCases = new List<Id>();
                    for (Case caseObj:caseList) {
                        if ((emIds.get(caseObj.Id)==caseObj.Contact.Email)&&
                            (caseObj.Status == 'In Progress')&&
                            (caseObj.EntitlementId != null)&&
                            (caseObj.SlaStartDate <= completionDate)&&
                            (caseObj.SlaStartDate != null)&&
                            (caseObj.SlaExitDate == null))
                                updateCases.add(caseObj.Id);
                    }
                    if(updateCases.isEmpty() == false)
                        milestoneUtils.completeMilestone(updateCases,
                            'First Response', completionDate);
            }
```

```
                }
            }
    }
}
```

Sample Trigger 3

While the previous trigger dealt with email messages, this sample case comment trigger marks a First Response milestone Completed when a public comment is made on the case. You can use it if a public case comment is a valid first response in your support terms.

📝 Note: This trigger references the milestone utility test class, so be sure to define the test class first.

To define this trigger in your org:

1. From Setup, enter `Case Comment Triggers` in the Quick Find box, then click **Case Comment Triggers**.

2. Click **New**.

3. Copy the trigger text and paste it into the text field.

4. Click **Save**.

```
trigger CompleteFirstResponseCaseComment on CaseComment (after insert) {
    if (UserInfo.getUserType() == 'Standard'){
        DateTime completionDate = System.now();
        List<Id> caseIds = new List<Id>();
        for (CaseComment cc : Trigger.new){
                if(cc.IsPublished == true)
                caseIds.add(cc.ParentId);
        }
        if (caseIds.isEmpty() == false){
            List<Case> caseList = [Select c.Id, c.ContactId, c.Contact.Email,
                    c.OwnerId, c.Status,
                    c.EntitlementId, c.SlaStartDate,
                    c.SlaExitDate
                    From Case c
                    Where c.Id IN :caseIds];
        if (caseList.isEmpty() == false){
            List<Id> updateCases = new List<Id>();
            for (Case caseObj:caseList) {
                if ((caseObj.Status == 'In Progress')&&
                        (caseObj.EntitlementId != null)&&
                        (caseObj.SlaStartDate <= completionDate)&&
                        (caseObj.SlaStartDate != null)&&
                        (caseObj.SlaExitDate == null))
                    updateCases.add(caseObj.Id);
                }
                if(updateCases.isEmpty() == false)
                    milestoneUtils.completeMilestone(updateCases,
                    'First Response', completionDate);
            }
        }
    }
}
```

Set Up Entitlement Processes

Entitlement processes are timelines that include all of the steps (milestones) that your support team must complete to resolve cases or work orders. Set up an entitlement process to apply to entitlements in your Salesforce org.

1. Create an Entitlement Process

   Create an entitlement process to give support agents a timeline of required steps to follow when solving support records. Each process includes the logic necessary to determine how to enforce the correct service level for your customers.

2. Customize Entitlement Process Fields

   If you intend to use entitlement processes in your Salesforce org, customize page layouts to ensure that support agents can see and interact with entitlement processes.

3. Add a Milestone to an Entitlement Process

   Add milestones to entitlement processes to define required steps in your support process.

4. Add a Milestone Action to an Entitlement Process

   Milestone actions are time-dependent workflow actions that occur at every step (milestone) in an entitlement process. After you create an entitlement process and add milestones to it, add milestone actions to the milestones.

5. Apply an Entitlement Process to an Entitlement

   You've created an entitlement process; now it's time to use it! Apply an entitlement process to a customer's entitlement so all support records linked to the entitlement use that process.

Create an Entitlement Process

Create an entitlement process to give support agents a timeline of required steps to follow when solving support records. Each process includes the logic necessary to determine how to enforce the correct service level for your customers.

You must create milestones before you create an entitlement process.

💡 **Tip:** The Entitlement Management Trailhead module introduces you to common terms and walks you through creating an entitlement process. And, it's fun! To get started, see Entitlement Management.

1. From Setup, enter `Entitlement Processes` in the `Quick Find` box, then select **Entitlement Processes** under Entitlement Management.

2. Click **New Entitlement Process**.

3. Select an entitlement process type. If you intend to use the process to enforce milestones on cases, select Case. If you intend to use the process to enforce milestones on work orders, select Work Order. (If work orders aren't enabled in your org, you only see the Case option.)

   ✍️ **Note:** If you're using entitlement processes, manage customers' work orders and cases on separate entitlements. This is because an entitlement process only runs on records that match its type. For example, when a Case entitlement process is applied to an entitlement, the process only runs on cases associated with the entitlement. If a work order is also associated with the entitlement, the process won't run on the work order.

4. Enter a name—for example, `Standard Support Process`—and a description.

5. If you want to enable the process, select **Active**.

> 💡 **Tip:** We recommend waiting to activate an entitlement process until you add milestone actions to it. You can't update or delete milestone actions on a process after it's activated and applied to a record.

6. Optionally, if entitlement versioning is enabled, select **Default Version** to make this version of the entitlement process the default.

7. Choose the criteria for records to enter and exit the entitlement process.

Field	Description	More Actions to Take?
`Record* enters the process`	**Based on record created date** Select if records should enter the process when they're created.	No
	Based on a custom date/time field on the record Select if you want the value of a custom date/time field on the record to determine when the record enters the process.	Yes, a drop-down list displays for selecting the custom date/time. You can only choose a custom date/time, not a custom date.
`Record exits the process`	**Based on when record is closed** Select if records should exit the process when they're closed.	No
	Based on custom criteria Select if records should exit the process based on criteria you define.	Yes, select one of the following: • Choose `criteria are met` and select the filter criteria that a record must meet for it to exit the process. For example, set a case filter to `Priority equals Low` if you want cases with the `Priority` field marked Low to exit the process. Choose `formula evaluates to true` and enter a formula that returns a value of "True" or "False." Salesforce triggers the rule if the formula returns "True." • Choose `formula evaluates to true` and enter a formula that returns a value of "True" or "False." Records exit the process if the formula returns "True." For example, the formula `(Case: Priority equals Low) AND(Case: Case Origin equals Email, Web)` moves cases out of the process if their `Priority` field

Field	Description	More Actions to Take?
		is Low and the `Case Origin` field is marked Email or Web.

*The field names you see will reflect the entitlement process type you selected.

8. Optionally, choose the business hours you'd like to apply to the entitlement process. The business hours you set here calculate the Target Date for all the milestones on this entitlement process.

9. Save your changes.

🛑 **Important:** All users, even those without the "View Setup and Configuration" user permission, can view entitlement processes via the API.

Customize Entitlement Process Fields

If you intend to use entitlement processes in your Salesforce org, customize page layouts to ensure that support agents can see and interact with entitlement processes.

1. Add these fields to case and work order page layouts.

Field	Description
`Timeline` (available only on case page layouts)	How far along a case is to reaching an entitlement process's milestones. You can click or hover your mouse pointer over each milestone to view its details. These icons represent milestones: • Completed milestone • Violated milestone You can drag the Handle icon ( ) along the Timeline Zoom tool to view past and future milestones. If an entitlement process applies to the case, this field appears.
`Stopped`	Lets you stop an entitlement process on a record, which might be necessary if you're waiting for a customer's response. 💡 **Tip:** If you want to use this feature, give your agents access to the field through field-level security. If a case is stopped and a user doesn't have access to the Stopped field, the

Field	Description
	Case Milestone component in Lightning Experience continues to track time for them, even though the timer is paused.
	Until the Stopped field is updated (unpaused), each time the user refreshes the case record, the milestone timer restarts from the current local time. If this is happening, the user might not have access to the Stopped Since field. Make sure that this field is also added and available to your agents so that the time remains paused from the time it was Stopped last.
	Don't confuse your users; give them access to the Stopped and Stopped Since fields.
`Stopped Since`	The date and time the entitlement process was stopped on the record.
	💡 Tip: If you want to use the Stopped feature, make sure that the Stopped Since field is also added to the page layout and that your agents have access to this field through field-level security.

2. Save your changes.

Add a Milestone to an Entitlement Process

Add milestones to entitlement processes to define required steps in your support process.

1. From Setup, enter `Entitlement Processes` in the Quick Find box, then select **Entitlement Processes**.

2. Click the name of an entitlement process.

3. If you're using versioning, click the name of the entitlement process again under Entitlement Process Versions.

4. Click **New** on the Milestones related list.

5. Choose the milestone.

6. In `Time Trigger (Minutes)`, enter the number of minutes in which users must complete the milestone before it triggers an action.

Or, if you'd like the trigger time for the milestone to be calculated dynamically based on the milestone type and properties of the case or work order, click **Enable Apex Class for the Time Trigger (Minutes)**.

> 📝 Note: You must have a custom Apex class that implements the `Support.MilestoneTriggerTimeCalculator` Apex interface to use this option.

7. If you selected **Enable Apex Class for the Time Trigger (Minutes)**, use the lookup to specify an Apex class for the dynamically calculated milestone.

8. Choose when the milestone starts:

Select	To	Use If
Milestone Criteria	Calculate the milestone `Target Date` when the milestone is applied to a support record (matches the record criteria).	A milestone's `Target Date` is based on when it's applied to a record. Use if the milestone is recurring.
		📝 Note: An entitlement process usually starts when the record is created, but its milestones aren't always applied right away.
Entitlement Process	Calculate the milestone `Target Date` when the entitlement process starts (by default, when a support record is created).	A milestone's `Target Date` is based on the start of the entitlement process. For example, first response and resolution times on a case always calculate their `Target Date` when the entitlement process starts.

9. Optionally, select the business hours that you want to apply to the Target Date calculation for this milestone. If you don't specify business hours for the milestone, then the Entitlement Process business hours are used. If neither are specified, then the business hours on the case or work order are used.

10. Specify the order in which Salesforce should process the milestones. This applies to situations where a support record matches the criteria of multiple milestones at the same time.

11. Enter the criteria a record must match for the milestone to apply to it:

- Choose `criteria are met` and select the filter criteria that a record must meet for a milestone to apply to it. For example, set a case filter to `Priority equals High` if you want the milestone to apply to cases with the `Priority` field marked High.

  Choose `formula evaluates to true` and enter a formula that returns a value of "True" or "False." Salesforce triggers the rule if the formula returns "True."

- Choose `formula evaluates to true` and enter a formula that returns a value of "True" or "False." The milestone applies to records if the formula returns "True." For example, the formula `(Case: Priority equals High) AND (Case: Case Origin equals Email, Web)` applies the milestone to cases where the `Priority` field is High and the `Case Origin` field is marked Email or Web. You can't use the `Case Owner` field in formulas.

12. Click **Save**.

📝 Note: Milestones are measured in minutes and seconds, but their start and end times are only accurate to the minute. For example, suppose a milestone is triggered at 11:10:40 a.m. and the time to complete the milestone is 10 minutes. In this case, the milestone target time is 11:20:00 am, not 11:20:40. As a result, the remaining time for the agent to complete the milestone is 9 minutes and 20 seconds, not the full 10 minutes.

Add a Milestone Action to an Entitlement Process

Milestone actions are time-dependent workflow actions that occur at every step (milestone) in an entitlement process. After you create an entitlement process and add milestones to it, add milestone actions to the milestones.

1. From Setup, enter `Entitlement Processes` in the `Quick Find` box, then select **Entitlement Processes**.

2. Click the name of an entitlement process.

3. Click the name of a milestone on the Milestones related list.

4. If you want to add a warning or violation action, add a time trigger first. After you add a trigger, the option to add a workflow action appears. Success actions use the milestone's time trigger.

   💡 **Tip:** If you want a violation action to fire immediately after the milestone is violated, set the time trigger to 0 minutes.

5. Click **Add Workflow Action** and select an option.

Workflow Action	What It Does	Example
New Task	Create a workflow task	Create a task for a support agent to call a customer when a First Response milestone is violated.
New Email	Create an email alert	Notify case owners when a First Response milestone on their case is near violation.
New Field Update	Define a field update	Update the case Priority field to `High` when a First Response milestone is near violation.
New Outbound Message	Define an outbound message	Send data about parts or services to an external system after a First Response milestone is completed.
Select Existing Action	Select an existing action	Use an existing email alert to notify a case owner when their case is near violation of a first response.

📝 **Note:** Time-triggered actions only occur during your Salesforce org's business hours. You can add up to 10 actions and 10 time triggers to each type of milestone action.

Apply an Entitlement Process to an Entitlement

You've created an entitlement process; now it's time to use it! Apply an entitlement process to a customer's entitlement so all support records linked to the entitlement use that process.

1. Go to the entitlement.

2. In the `Entitlement Process` lookup field, select the process you want to apply.

   > 🛇 **Important:** If you're using entitlement processes, manage customers' work orders and cases on separate entitlements. This is because an entitlement process only runs on records that match its type. For example, when a Case entitlement process is applied to an entitlement, the process only runs on cases associated with the entitlement. If a work order is also associated with the entitlement, the process won't run on the work order.

3. Click **Save**.

   > 💡 **Tip:** If you've set up entitlement templates, you can associate an entitlement process with a template so all entitlements created using that template automatically use the selected entitlement process.

ENTITLEMENT VERSIONING

Updating an Entitlement Process

Entitlement versioning lets you create multiple versions of an entitlement process, even if it's assigned to active entitlements and support records.

Use entitlement versioning if:

- You want to make several versions of an entitlement process that have minor differences
- You want to update an entitlement process to reflect changes in your business processes

You might find that an entitlement process needs to be updated seasonally, or that you need to roll back to a previous version.

> **Note:** To create multiple versions of entitlement processes, entitlement versioning must be enabled in your org. Select **Enable Entitlement Versioning** on the Entitlement Settings page in Setup.
>
> When you create versions of entitlement processes with the same name, the version number and notes help you differentiate between versions. Salesforce prevents you from disabling entitlement versioning so you always know which version you're working with.

When you create a new version of an entitlement process, you can change any of the following:

- Name
- Description
- Whether the process is active
- Whether the version is the default
- Entry criteria
- Exit criteria

You can also add notes about the version. This makes it easy to differentiate between multiple versions of the same process, especially if they have the same name.

On new versions of entitlement processes that are currently in use, you can add new milestones, but you can't edit existing ones. On new versions of processes that aren't currently in use, you can both add new milestones and edit existing ones.

Once you create a new version of an entitlement process, you can choose to apply it to all entitlements and support records assigned to the previously used version, or only to new entitlements and support records. All versions of an entitlement process must be the same type: Case or Work Order.

Create a New Version of an Entitlement Process

Entitlement versioning lets you create multiple versions of an entitlement process, even if it's assigned to active entitlements and support records. You can use multiple versions of an entitlement process at the same time in your Salesforce org.

> 📝 **Note:** To create multiple versions of entitlement processes, entitlement versioning must be enabled in your org. Select **Enable Entitlement Versioning** on the Entitlement Settings page in Setup.
>
> When you create versions of entitlement processes with the same name, the version number and notes help you differentiate between versions. Salesforce prevents you from disabling entitlement versioning so you always know which version you're working with.

1. From Setup, enter `Entitlement Processes` in the `Quick Find` box, then select **Entitlement Processes**.

2. Click the name of the entitlement process for which you want to create a new version.

3. In the Entitlement Process Versions list, click the version of the process from which you want to create a new version.

4. On the Entitlement Process Detail page, click **Create New Version**.

5. Add details about the new version. Follow these best practices:

   - Use the `Version Notes` field to explain what makes the version you're creating different from others. This makes it easier to differentiate between multiple versions of the same entitlement process.

   - Leave the name as is.

   - Click **Active** to be able to use the new version.

   - Click **Default** if you want to make the new version the default version of the process. This makes it easier to find in lookup field searches.

6. Click **Save**.
   After saving, you can modify the entitlement process' milestones if needed.

   > ⓘ **Important:**
   >
   > - On new versions of entitlement processes that are currently in use, you can add new milestones, but you can't edit existing ones. On new versions of processes that aren't currently in use, you can both add new milestones and edit existing ones.
   >
   > - All versions of an entitlement process must be the same type.

When you create a new version of an entitlement process, it isn't automatically applied to entitlements that were using the previous version. To learn how to apply a new version of an entitlement process to existing and new entitlements, see Use a New Version of an Entitlement Process.

Use a New Version of an Entitlement Process

After you create a version of an entitlement process, you can choose to apply it to all entitlements assigned to the previous version, or only to new entitlements. When you apply an entitlement process to an entitlement, it also applies the process to that entitlement's active support records.

> 📝 **Note:** To create multiple versions of entitlement processes, entitlement versioning must be enabled in your org. Select **Enable Entitlement Versioning** on the Entitlement Settings page in Setup.
>
> When you create versions of entitlement processes with the same name, the version number and notes help you differentiate between versions. Salesforce prevents you from disabling entitlement versioning so you always know which version you're working with.

Applying an Entitlement Process to a New Entitlement

Scenario: You're creating an entitlement and want to apply a particular version of an entitlement process to it.

1. Choose the entitlement process you want in the Entitlement Process lookup field on the entitlement.

> 💡 **Tip:** After you click the lookup icon on the Entitlement Process field, select "All Versions" in the lookup dialog box. Otherwise, you can only choose from the default versions of existing entitlement processes.

Applying an Entitlement Process to an Existing Entitlement

Scenario: You made a new version of an entitlement process, and you want to switch all the entitlements that were using the previous version over to your new version.

1. From Setup, enter `Entitlement Processes` in the `Quick Find` box, then select **Entitlement Processes**.

2. Click the name of the entitlement process you want to work with.
   The list on the main Entitlement Processes page shows the default version of each process. Click the name of a process to see a list of all available versions of it.

3. On the detail page for the entitlement process, click the name of the new version that you want to apply to existing entitlements (and by default, to cases or work orders linked to those entitlements).

4. Click **New Update Rule**.

5. Choose the version of the entitlement process you want to update from.
   You can update from any other version of the process, whether or not it's active.

6. Depending on the differences between the old and new versions of the entitlement process, updating an entitlement to the new version can trigger milestone warning and violation actions on that entitlement's support records (such as cases or work orders). To avoid such warnings and violation actions, select **Don't Trigger New Milestone Warnings and Violations**. We recommend selecting this so you don't trigger violation warnings on old entitlements and support records.

7. Click **Save**.
   The update rule detail page shows the estimated number of entitlements and support records that will be updated to use the new process.

8. Click **Start** to begin the update process.

Usually the update process completes within an hour, but it depends on the number of entitlements and records being updated. Throughout the update process, the update rule detail page refreshes periodically to show the number of entitlements and records processed. To stop the update at any time, click **Stop**.

EDITIONS

Available in both: Salesforce Classic and Lightning Experience

Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

USER PERMISSIONS

To create and update entitlement processes:
- Manage Entitlements

When the update rule displays a `Completed` status, all related entitlements and support records have been updated to use the new version of the entitlement process. If the status is `Completed With Exceptions`, some records couldn't be updated to the new version because of errors. To find out which records weren't updated and why, contact Salesforce Support.

Note: Cases that have already exited the previous version of your entitlement process—for example, if a case has been closed—are updated to use the new entitlement process.

LEARN MORE ABOUT ENTITLEMENT MANAGEMENT

Where to Learn More

You can find more helpful reference information about entitlement management features at help.salesforce.com.

Learn More About Entitlements
Search for these titles:

- Entitlements
- Guidelines for Working with Entitlements
- Verify Entitlements
- Entitlement Fields

Learn More About Service Contracts and Contract Line Items
Search for these titles:

- Service Contracts
- Guidelines for Working with Service Contracts
- Service Contract Fields
- Contract Line Items
- Guidelines for Working with Contract Line Items
- Contract Line Item Fields

Learn More About Milestones and Entitlement Processes
Search for these titles:

- Milestones
- Milestones: Supported Objects
- Milestone Statuses
- Milestone Actions
- Milestone Recurrence Types
- Entitlement Processes
- How a Record Moves Through an Entitlement Process
- How Business Hours Work in Entitlement Management