Synchronizer License FAQ
Synchronizer uses the Citrix licensing model to distribute licenses to endpoints. Citrix licensing is a system of components that function together. This system includes:

- License server: A system that allows licenses to be shared across the network.
- License files: The files that you need to license your product. These files are stored on the license server.

**Note:** Contact your Citrix representative to obtain your license files; the Citrix Licensing website provides additional information.

- License Administration Console: The interface you use to manage your license files and your license server.
- Product-side settings (for example, Synchronizer settings) that are associated with the license server.

Refer to the Citrix Licensing Overview for more information about License Server functionality.

**About Synchronizer Licensing**

This section addresses commonly asked questions, including:

- **How are Citrix licenses imported?**

Citrix licenses are imported into the License Server and have a count associated with them, which indicates how many end user licenses can be checked out using this license.

**Note:** In some cases, a Citrix license has an expiration date associated with it; this is the date after which end user licenses cannot be checked out from the License Server using this license. When an end user license is checked out, it is valid for 90 days from checkout regardless of the expiration date on the Citrix license that was used for this end user checkout.

- **How are licenses renewed?**

End user licenses are renewed (checked out when the client computer contacts Synchronizer) approximately every 12 hours, depending on the client checkin frequency. Each license renewal resets the end user license expiration date to 90 days from the renewal.

For example, if a Citrix license expires on 12/1/2014, and an end user license was renewed on 11/30/14 using the license that is nearing expiration, the end user license will not expire until 90 days from 11/30/2014.
**Note:** The end user license expiration date is after the expiration date on the License Server's license(s).

- **What happens when an end user license expires?**

  When an end user license (for example, a XenClient or DesktopPlayer license) expires, it has no affect on the user's experience on the client computer. Updates to policies and the virtual machine continue as long as the client computer does not unregister from Synchronizer.

  **Note:** In the event that an end user license expires, the Synchronizer console displays error icons in the Users table within the License panel.

- **What happens when a Citrix license expires?**

  When a Citrix license expires, new end users are prevented from registering to Synchronizer if there are no other unexpired licenses of the same type on the License Server. Additionally, renewal of end user licenses is also prevented.

- **How do I determine the status of a license?**

  The Synchronizer console provides a number of ways to determine the current license status. It provides a **License Server** tab that provides license status information:
The **trial period** represents the period of time after Synchronizer first contacts a License Server which has no licenses configured. Synchronizer is considered to be in a **grace period** for 30 days, during which end users can register. Once a license is imported into the License Server, the outstanding licenses granted during the grace period are reconciled with the License Server.

The **grace period** represents the time when Synchronizer is out of contact with the License Server for an extended period of time. License checkouts between an endpoint and Synchronizer will be granted up to the number of licenses that were available when Synchronizer last contacted the License Server. These checkouts will be reconciled once contact with the License Server is re-established.

**Note:** Licenses granted while Synchronizer is in a grace period are noted as Grace licenses in the Licenses>Users table portion of the management console.
How does Synchronizer display the license state?

The Synchronizer console provides a number of visual indicators that help display the current license state. These icons are displayed in the Expiration Date field in a number of interface panels; icons represent either an expired (a red X icon) or grace period (an orange exclamation point) license.

Use the Citrix Licenses panel to display a table of all licenses:

![Image of Synchronizer console with Citrix Licenses panel]

You can view the state of an individual user license in the Summary panel. Select the user in the navigation panel to display the Summary panel (this example illustrates an expired license):

![Image of User huey with Summary panel]

- **Citrix Licenses**
- **User huey**
- **Summary**
- **Groups**
- **Policies**
- **Events**
- **Virtual Machines**
- **General**
  - Account Name: huey
  - Full Name: huey
  - Computer: HP-EliteBook-8460p-CNU147282S
  - Server: Westford
  - Licenses:
    - Type: XenClient Enterprise
      - Expiration Date: 9/2/2014
  - Distinguished Name: CN=huey,OU=QA,DC=lab,DC=local
The example below illustrates a license that was granted or renewed during a grace period: