

# Altium NEXUS Server



A distinct design solution in its own right, the *Altium NEXUS Server* works in harmony with Altium NEXUS to provide an elegant answer to the question of handling design data with secured integrity. The Altium NEXUS Server not only provides rock-solid, secure storage of data, but also enables re-release of data as distinctly separate revisions - essentially tracking design changes over time, without overwriting any previously released data. It also caters for the lifecycle of the data to be managed, allowing people that need to use the data to see, at-a-glance, what stage the data has reached in its 'life' and therefore what it can be safely used for.

But the Altium NEXUS Server is used to store so much more than just the data generated from a board design. It is also used to manage all other sets of data obtained from the Design Area through the running of specific release processes. This includes the release of component definitions, domain models, schematic sheets of circuitry and design templates. Indeed, you can even create and manage your entire design projects directly within the server, with the additional benefit of collaboration support, meaning an entire team can work concurrently on the same board design - even annotating the design with comments. You can even control the working environments of your designers - ensuring that company-wide design standards are enforced and adhered to.

By furnishing a set of reusable design 'building blocks' within the Altium NEXUS Server, you can embark on fresh projects safe in the knowledge that each model, component, and higher-order design element has been ratified and approved for use, with no having to reinvent the wheel as it were. The server becomes both the source and destination of design elements, with each new design utilizing elements released to, and managed through, the server. And by designing only with elements from the Altium NEXUS Server, the integrity of those designs is inherently assured.

Read about [Installing the Altium NEXUS Server](#), [Getting Your Altium NEXUS Server Licensed](#), [Working with a Managed Content Server](#), [Accessing Your Server from Altium NEXUS](#), [Details for IT Departments](#)

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## Server Items



Within the Altium NEXUS Server, each design entity that can be stored, managed, and reused, is represented as a specific type of *Item*. An Item is uniquely identified within the server and can contain any number of *Revisions*, where a revision contains the data for that Item. Each time a change is made to the data contained within a revision - which for most Item types can be edited directly within an associated temporary editor - it is committed (or re-released) into a new revision of that Item, ensuring that no existing revision can ever be overwritten, and thereby ensuring the highest integrity.

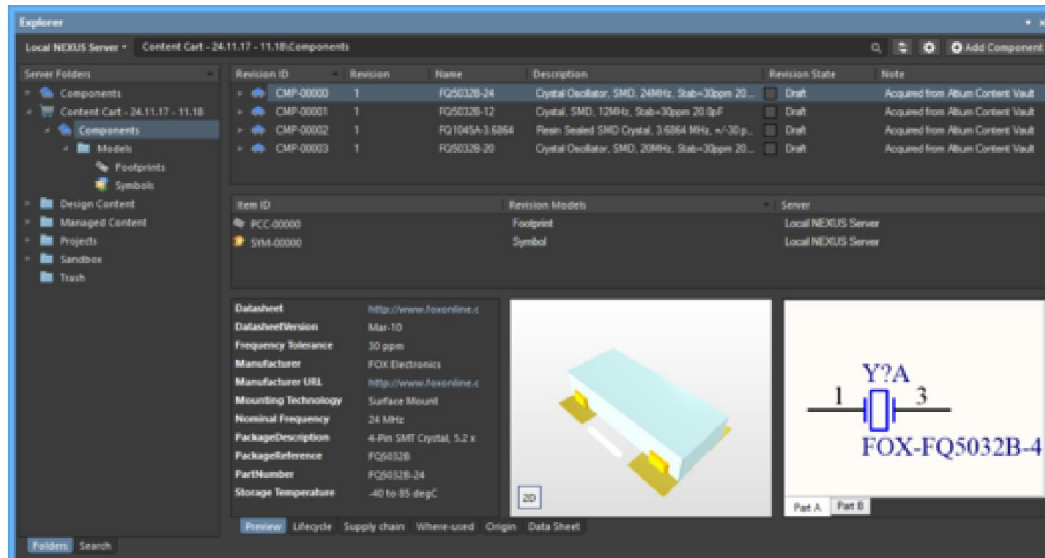
An Item can have any number of revisions, which are essentially an evolution of that Item over time. A change is made and the new data content is committed/uploaded/released into a new revision. The data stored in each revision of an item is therefore typically different. To identify between these different revisions of an Item, a revision identifier (ID) is used, which in combination with the Item ID creates a unique identifier for each release of an Item. This gives us the *Item-Revision*.

Another important aspect of an Item Revision is its *Lifecycle State*. This is another identifier that can be used to quickly assess what stage that revision has currently reached in its *life*, and what designers are therefore authorized to do with it. Where the Revision reflects design changes made to the Item, the Lifecycle State reflects the state of the item from a business perspective, such as Planned, New From Design, For Production, Obsolete, and so on.

Read about [Server Items](#).

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## The Explorer Panel



Providing the direct interface to your Altium NEXUS Server is Altium NEXUS's [Explorer panel](#). From this panel you can perform many activities, including:

- Creating and managing the organizational structure used in the server.
- Creating any number of Items, each representative of a design object.
- Direct editing and placement of Item Revisions.
- Reviewing and managing the lifecycle of Item revisions.
- Interrogating the usage of a particular Item revision (Where-Used).
- Browsing and managing supply chain information for Component Items.
- Downloading stored data, including data generated through the managed release of board design projects.

The *Explorer* panel becomes your trusty right-hand, presenting a collection of features that can really enhance your productivity when working with the Altium NEXUS Server through Altium NEXUS.