

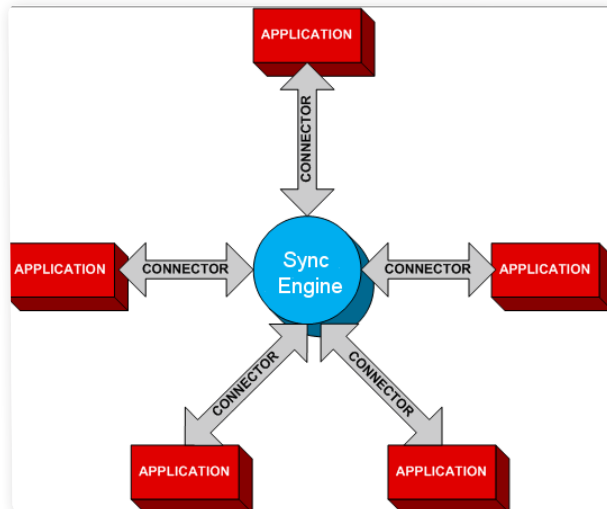
# Higher Levels of Collaboration

## Novell Data Synchronizer: Connecting Disparate Systems

by Ken Baker

**With interoperability at the core of everything that Novell does, it's no wonder that a key architectural component of the Novell collaboration vision is a new technology that enables your disparate collaboration solutions, business-critical applications and mobile devices to seamlessly synchronize events and information. Available soon, Novell Data Synchronizer is a bi-directional, many-to-many synchronization engine that provides back-end synchronization of e-mail, calendar items, contacts and tasks to multiple systems.**

Since Novell Data Synchronizer is a multi-source, multi-target synchronization engine, it's not tied to any specific collaboration solution. As a result, it will enable the synchronization of data and events between traditional collaboration systems as well as mission-critical enterprise applications such as CRM, ERP and other business solutions. Whenever a change occurs in one of these connected systems, the product will store the changes in real time to allow other connected systems to access them. (See [Figure 1](#).)



### **Synchronization hub and spoke model**

**Figure 1:** Novell Data Synchronizer enables seamless back-end synchronization of data and events between traditional collaboration systems as well as mission-critical enterprise applications.

### > Making Mobile Connections

Following a hub and spoke model—with the synchronization engine as the hub and connectors as the spokes—Novell Data Synchronizer will first provide connectors for mobile devices, Novell GroupWise, Microsoft SharePoint, SugarCRM and salesforce.com. In the future, a variety of other connectors—for Novell Teaming, Documentum, SAP, Exchange and more—will also be made available.

One of the most anticipated connectors for Novell Data Synchronizer is the Mobility connector. This connector will provide the mobile support foundation for Novell GroupWise and Novell Teaming. Through the Mobility connector, your users will enjoy even more functions, performance and device flexibility than they have with Novell GroupWise Mobile Server. In fact, all GroupWise Mobile Server customers will have access to the Novell Data Synchronizer Mobility Pack, which includes Novell Data Synchronizer, the Mobility connector, and the GroupWise connector. (See Move Up and Go Mobile.) Additionally, Novell will provide them with resources to simplify the move from GroupWise Mobile Server to the Novell Data Synchronizer Mobility Pack. (Novell will continue to support GroupWise Mobile Server until December 2010).

The Mobility connector will synchronize e-mail, contact and calendar data, and should be able to work with most mobile devices that use the iPhone (2.0, 2.0. 3.1 or later ), Windows Mobile (6.0, 6.1 and 6.5), Palm, Symbian (Series 60 3rd Edition, 4th Edition, or 5th Edition), and Android (2.0) operating systems. To deliver stellar synchronization between BlackBerry devices and Novell GroupWise, we are continuing our long-time partnership with Research In Motion. (See BlackBerry Support.)

When you install the Novell Data Synchronizer Mobility Pack, the Mobility connector will automatically be installed. As you prepare for the installation, the Novell documentation provides a Mobility Pack Installation Summary Sheet to help you gather needed details such as LDAP server information, LDAP credentials, LDAP containers, GroupWise post office agents and mobile device ports.

Once you have the Novell Data Synchronizer engine and the Mobility Pack installed, you will need to set up an account on the users' mobile devices in order to allow them to synchronize using the Mobility connector. While the actual configuration will vary based on device type, the account will typically need to be configured with the user's GroupWise e-mail address, GroupWise mailbox password, e-mail account type, Novell Data Synchronizer server IP address or hostname, and a secure connection certificate. Once the mobile device connects to the Novell Data Synchronizer system (depending on GroupWise administration settings), the user's GroupWise personal address books, past e-mail messages (3 days or newer), past calendar items (14 days or newer), and all future e-mail and calendar items will be synchronized to the mobile device.

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**> More Connections**

The GroupWise connector for Novell Data Synchronizer will be provided as part of Novell GroupWise and will leverage the SOAP interface to synchronize e-mail, tasks, calendar data and contact information across other collaboration systems. In order to get full functionality from the GroupWise connector, you'll need to be running Novell GroupWise 8.0.2, which will be available when

Novell Data Synchronizer ships. Additionally, SUSE Linux Enterprise Server 11 64-bit (using the Python database) is the only initially supported platform for the Novell Data Synchronizer engine. Additionally, Novell Data Synchronizer customers will automatically receive SUSE Linux Enterprise Server entitlements for as many servers as are required to run Data Synchronizer. In the future, Novell plans to expand platform support for Novell Data Synchronizer to include Windows, as well as other data bases.

In addition to the GroupWise connector, Novell will soon provide a Teaming connector as part of Novell Teaming. The initial Teaming connector will synchronize personal calendar and task information. Subsequent versions of the Teaming connector will also synchronize information related to teams, contacts and groups.

As mentioned before, Novell will also provide some non-Novell connectors. For example, its SharePoint connector will synchronize e-mail data, calendar items, tasks and contacts between SharePoint and other connected systems. The SugarCRM and salesforce.com connectors will synchronize the same collaboration data between these products and other connected systems.

It's important to note that connectors won't be limited to what Novell provides. By leveraging the Novell Data Synchronizer software development kit and its open API, organizations and Novell partners will be able to create custom connectors for their own systems as well as third-party solutions. The open nature of Novell Data Synchronizer creates limitless opportunities for you to create highly productive environments where your users can share relevant content from a wide array of collaboration and enterprise systems, such as CRM, ECM and document management systems; cloud-based social applications; and even solutions that compete with Novell collaboration offerings.

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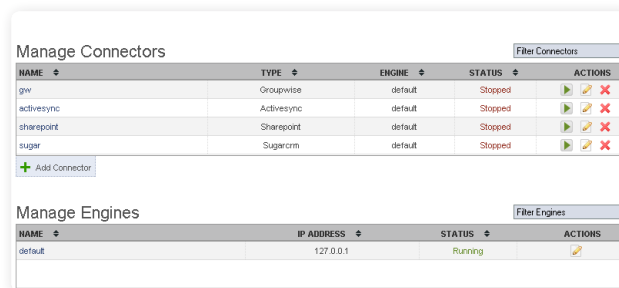
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### **> Configuring Connections**

While a single synchronization engine will be able to host multiple connectors, Novell Data Synchronizer allows you to deploy multiple synchronization engines to give you the flexibility and scalability to manage the product's workload. After you install a synchronization engine, you can manage it and its connectors through the product's centralized Web interface by entering the server's IP address or domain name, and port 8080 (e.g. mydomainname.com:8080). While the management interface defaults to port 8080, you can change it as needed to avoid any conflicts that you might have with other products using that port.

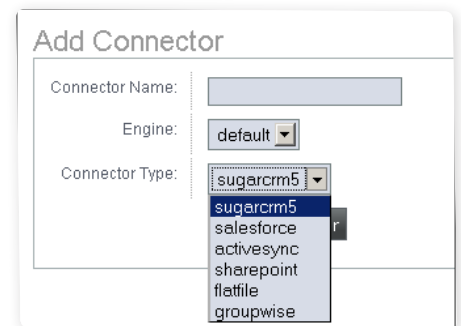
After you log into the Web interface using the admin user name and password that you established during the install, you'll be presented with the main management screen that gives you the option to manage your synchronization connectors or manage your synchronization engines. (See Figure 2.) To add a connector, simply click the Add Connector button and you'll be presented with three options: give your connector a name, assign it to a specific engine and choose the type of connector. (See Figure 3.)

Once you add a connector, you'll be prompted to configure its settings. While the settings dia-



**Manage Connectors dialog**

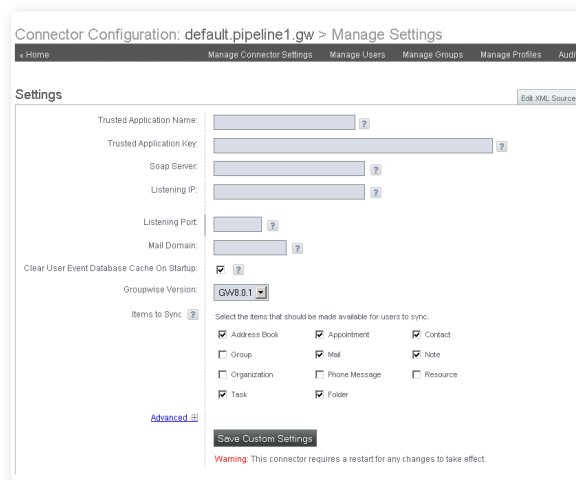
**Figure 2:** You can easily manage your synchronization engines and connectors through the centralized Web interface in Novell Data Synchronizer.



**Add Connector dialog**

**Figure 3:** Novell Data Synchronizer makes it easy to add different connectors to your synchronization engine.

log will vary for each connector type, the first settings you'll configure for the GroupWise connector will be its trusted application name and trusted application key. This trusted name and key are crucial for providing the necessary authentication credentials to access your GroupWise system. If you're running GroupWise 8 SP1 or later, you can easily create this trusted name and key in ConsoleOne. (See Figure 4.)



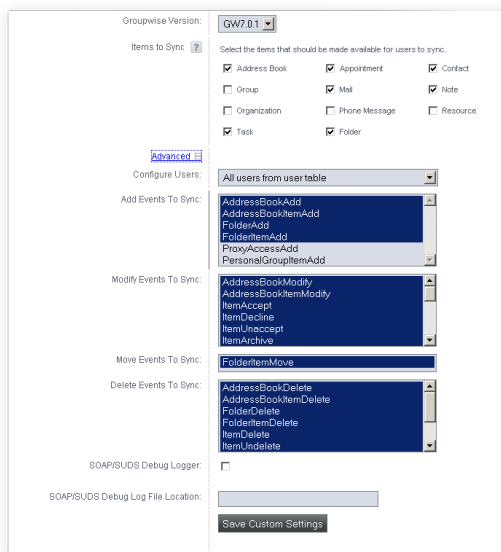
**Manage Settings dialog**

**Figure 4:** Each type of synchronization connector will have its own set of configurable settings.

The next setting you'll need to configure is the SOAP server, which is essentially the IP address of your GroupWise POA. You have to have SOAP enabled on your POA since the GroupWise connector relies on the GroupWise SOAP interface. You'll also need to enter the port number that you want the GroupWise connector to listen, meaning that you or your administrator will need to know what ports are available.

The settings page is also where you indicate the general type of GroupWise items you want the connector to synchronize. This can include address books, groups, organizations, tasks, appointments, mail, phone messages, folders, contacts, notes and resources.

If you click the Advanced button on the settings page, the interface presents you with additional configuration options. One of the advanced options allows you to indicate events that you want to synchronize—in addition to the default events. These additional non-default events would include items such as the addition of proxy accesses, folder modifications or personal group item additions. The Advanced button also allows you to delete or modify the events being synchronized. (See [Figure 5](#).)



### Advanced settings

**Figure 5:** The GroupWise Connector Advanced settings lets you add, delete and modify the events you want synchronized.

## > Customizing User Synchronization Needs

In addition to configuring a connector's settings, you can specify which users and groups will use that connector, and how they will be able to use it. Through the interface, you can perform an LDAP query to pull all or a subset of your users and groups from your GroupWise system. It also provides a convention called application name that allows you to specify an alternate name for users that might be referenced in other systems by a different user name than they use for GroupWise.

Additionally, Novell Data Synchronizer lets you create profiles for your users and groups that allow detailed customization on how and what will be synchronized for different sets of users. For example, even though most of your users might want to synchronize all the events you specified in the general connector settings, you might have a group of users that only need to synchronize a subset of those events. Additionally, you might not want bi-directional synchronization for all events. As an example, you can specify that if you add an appointment to your mobile device, you want it synchronized with GroupWise, but when you add an appointment to GroupWise, you don't want it synchronized with your device. (See [Figure 6.](#))

	Direction Of Syncable Items	
	Engine To Connector	Connector To Engine
AddressBookItem:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Appointment:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CalendarItem:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Contact:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DocumentRef:	<input type="checkbox"/>	<input type="checkbox"/>
Group:	<input type="checkbox"/>	<input type="checkbox"/>
Mail:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Note:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Organization:	<input type="checkbox"/>	<input type="checkbox"/>
PhoneMessage:	<input type="checkbox"/>	<input type="checkbox"/>
Resource:	<input type="checkbox"/>	<input type="checkbox"/>
Task:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Folder:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Save

### **User profile**

**Figure 6:** You can create user profiles that give you granular customization over how your synchronization connector for GroupWise will synchronize events.

## **> Bringing Together People, Tools and Interactions**

One of the fundamental beliefs at Novell is that the formula for success within any organization is rooted in the ability to bring people, tools and interactions together in simple and secure ways. By bringing these three elements together successfully, you can drive new innovation and new levels of productivity in your organization. That's the whole point of the Novell Data Synchronizer offering: to raise your collaboration efforts to even greater heights by connecting your disparate collaboration software, business-critical applications and mobile devices. Furthermore, Novell Data Synchronizer plays a key role in the overall Novell collaboration vision to bring together people, tools and interactions in a way that empowers you to collaborate as one and achieve the highest levels of innovation, productivity and success.

### **Learn More about Novell Data Synchronizer**

- [Novell Data Synchronizer Mobility Pack Technology Preview](#)
- [Novell Data Synchronizer Overview Presentation](#)
- [Novell Collaboration Strategy Presentation](#)