

## **White Paper**

# **CorasWorks® Intranet >< Extranet Integration Scenarios on SharePoint**

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CorasWorks Intranet >< Extranet Integration Scenarios on SharePoint

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## Introduction

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Since 2003, CorasWorks has been serving customers on SharePoint. Almost all of our customers have implemented SharePoint in an Intranet context. Increasingly organizations are looking to extend SharePoint to web, external facing audiences. The Extranet scenario (vs. just a web site or as part of one) is very attractive because it allows organizations to gain business leverage through the integration of its customers, partners, vendors, and community participants. These external participants provide leverage to an organizations' workforce. Handled effectively and efficiently the leverage of this external workforce will translate into increased business productivity.

Based upon the native architecture of the Microsoft SharePoint platform, organizations have tended to have separate infrastructures to serve the needs of Intranet and Extranet scenarios. These separate environments tend to not have a high degree of integration, which reduces the overall effectiveness of their work environment.

In this white paper, we will examine a number of scenarios in which these two "zones" of work are integrated by leveraging the CorasWorks Application System on SharePoint. These scenarios are implemented using off-the-shelf products, applications and configuration, i.e., without custom binary coding.

There are two groups of scenarios. One is just integrating zones where you are using SharePoint data. The second is a group of scenarios where you have extended your zone to include data from external data sources, applications, and cloud services.

### **SharePoint to SharePoint**

- Intranet to Extranet Push Workstreams
- Extranet from Intranet Connections - Pull
- Intranet >< Extranet Connections – Pull and Push

### **Extended Scenarios**

- Custom Database in Extranet
- LOB Database Applications in the Intranet
- Adding Cloud Application Services

It is most common to think of SharePoint as environments where you store information, i.e., as a content repository. However, for purposes of looking at the integration scenarios, in particular, the extended scenarios, it is helpful to think of a SharePoint environment as primarily a front-end work environment, regardless of what or where the content/data is located. Thus, you have a front-end environment for internal users and you have a front-end environment for external users. For purposes of this white paper we will assume that the External environment is outside of your corporate firewall.

We assume that readers of this document are using CorasWorks on SharePoint. In particular, we assume that you are familiar with the CorasWorks Workplace Suite and CorasWorks Toolset. For integration scenarios, the Toolset is the primary CorasWorks product being used. Version 1.6.1 of the Toolset was released in February 2010. This version can now be run on both SP2007 or SP2010. In addition, the CorasWorks Workplace Suite v10.3.1, also released in February 2010, runs on SP2007 or SP2010. The Suite applies primarily only to the Intranet zone. Accordingly, any scenario discussed in this white paper would relate to an Intranet or Extranet running on SP2007 or SP2010.

In this document, we also reference a third-party ISV solution as our target solution for the Extranet - the Spirit Community Services Suite. This solution, published in the CorasWorks App Store by Spirit EDV-Beratung (Niederkassel, Germany), provides an out of the box Community Extranet for extranets in the cloud (outside of the firewall). It is built on the CorasWorks Toolset and is made up of 4 modules that can be used in various combinations to drive collaboration in an Extranet, in an Intranet, or across these zones.

This document is written for Workplace Architects. It mentions the following CorasWorks capabilities:

- Workplace Suite Actions Wizard
- Workplace Suite Email Actions
- Workplace Suite Publisher Actions
- Workplace Suite Data Displays – Toolset Integration
- Toolset External Data Providers
- Toolset SharePoint List Data Providers
- Toolset Database Writer
- Toolset Business Data Form Adapter
- Toolset Mash-Up Adapter
- Toolset Supported Authentication Frameworks

For reference, in our SharePoint-to-SharePoint scenarios we will be talking about integrating News and Announcements across the zones. While we are referencing Announcements, this can relate to any SharePoint list content. Before getting to the Scenarios we will cover the X Design Pattern that provides us with a simple conceptual framework for these broad scenarios, and, we will briefly discuss the use of Workflow & Workstreams to manage the flow of information across all SharePoint environments.

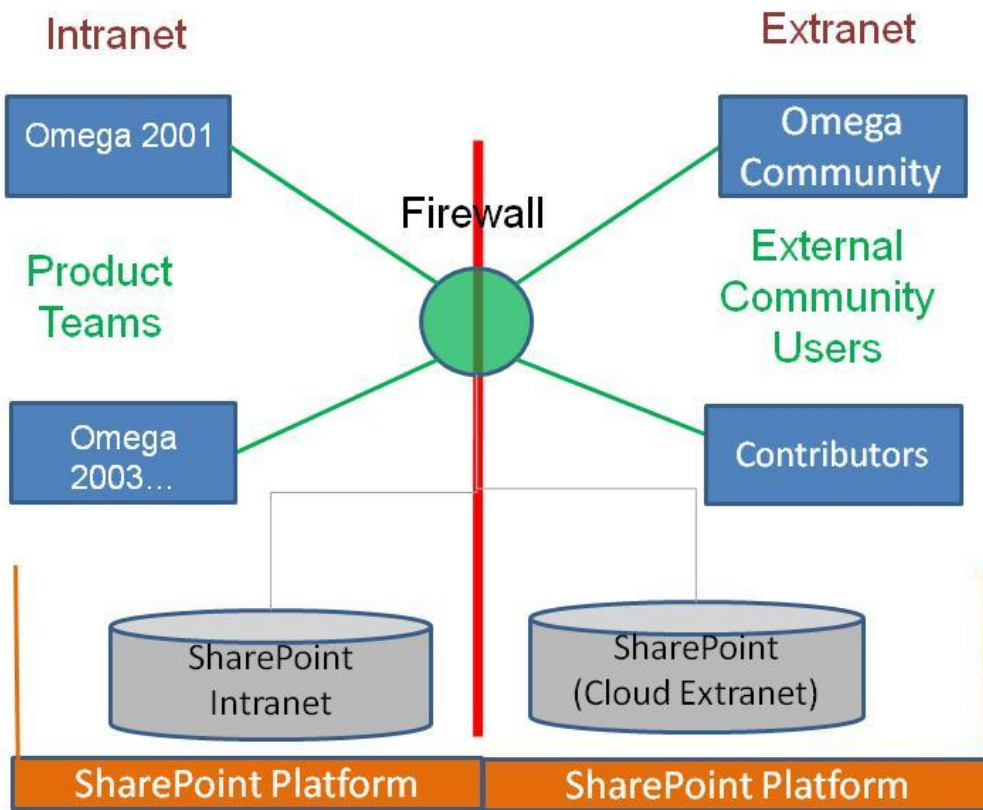
## The X Design Pattern

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At the core of all of these scenarios is what we refer to as the X design pattern. This design is a standard of CorasWorks and is used primarily to support those scenarios where contributors and consumers are crossing boundaries of departments, Intranets, Extranets, Server Farms, and Organizations. In these examples, often a contributor of information is also a consumer of information. For instance, a contributor of an announcement may also consume the announcements by others in other departments. Or, a user of an Extranet may enter a service ticket as a contributor and consume a knowledge base.

The core capabilities of the CorasWorks Application System on SharePoint support the scenarios that cross these boundaries. Natively, the services of the Spirit Community Services Suite because of their central management and flexible design also support the X design scenarios.

Below is a screenshot of the X design pattern for using the Spirit CSS in an Extranet environment that is integrated with an organizations Intranet. In this scenario, there is an Extranet Product Community running on a separate server farm in the cloud. This environment is then integrated with the Intranet. Within the Intranet there are four product teams that work on different versions of the “Omega” product. Users within the Intranet can see and work on information in the Extranet. Users of the Extranet can see and interact with information in the Extranet or coming from the Intranet.



## Controlling the Flow: Workflow & Workstreams

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Before going into the Intranet >< Extranet scenarios, let's start with a review of some of the basic ways that information flows across an environment of CorasWorks on SharePoint. We will cover a number of different scenarios by which contributors prepare information, get it approved, and kick-off the process of pushing it to a destination such as the Extranet.

We'll look at a common implementation within just an Intranet environment – the flow of announcements. If you think of an enterprise Intranet, there are logical and organizational barriers between departments and business functions. In addition, there are technical barriers such as crossing sites, site collections, and web applications. Thus, even within just an Intranet, you have a situation where the X design applies. In this scenario, you want to have people that contribute announcements, people that approve them for broader dissemination, and, people that consume announcements.

An example of this for announcements is the Announcements Service that is part of the Spirit Community Services Suite implemented with the CorasWorks Department Solution Set. Imagine that you have 30 departments/business functions that create announcements. Some are just for the department while others are useful to the whole organization.

Here is how it works:

- Users work in Departments. They contribute news and announcements for the department. The announcements are flagged for external consumption (meaning outside of the department).
- The Announcement Service picks them up because they are flagged and that department is part of the portfolio of sites of the service.
- The service then transforms the information and pumps the announcement information into the UI. This UI is distributed. One place it is distributed is in each department.
- Thus, while a given user may contribute announcements about their department, they are also consuming news and announcements from across the organization in the same place.

The organizational boundaries we are crossing are departments and business functions. The technical boundaries we are crossing are Sites, Site Collections, Web Applications and Content Databases. All of this flow is happening within just the Intranet “zone”.

This is a good basic start. However, what we are missing is workflow and workstreams. With a basic implementation the announcements may just instantly get routed to consumers (this also applies when crossing to the Extranet zone). However, often you want to have certain “gates” in the workstream to control the flow of information. Workflow in a SharePoint context is normally associated with Approval processes for information to be published. In this case, Approvals would be used to control the flow of the information. Workstreams, a major feature of CorasWorks implementations, cover the actual movement of information from one data store to another data store incorporating the possibility of the information transforming its form or use.

Following we will discuss a few of the scenarios that may be put in place to control and manage the flow of information in this scenario.

## **Simple Content Approval Gates**

Using native SharePoint, you can put Content Approvals at the source of the Announcement. Thus, a user would see a group of Announcements in a department that are flagged “External”. They would manually approve them. Once approved, the Announcement Service would serve them up.

## **Creating a People-Driven Approval Process (Human Workflow)**

Assuming that you are also using the CorasWorks Workplace Suite you can also create announcement Approval processes. This is done using CorasWorks Actions including Email actions. Thus, when a user flags an announcement, they can push an email to a person to come and approve it. Alternatively, using CorasWorks List Activation or Windows Workflow Foundation, the email pushing may be done behind the scenes routing the request for approval to the appropriate person based upon the announcement metadata.

The approver may not be in the same department as the contributor. They may be an individual that decides what news and announcements are made available enterprise wide. Thus, each user would be running the same action (which is centrally configured) to alert a single or multiple users. The approver may use a central console, managed in a central location, where they could see all of the announcements across all departments that need approval. This design is significant for Intranet-Extranet scenarios because it puts an individual in place as the gatekeeper to the workstream of moving information to the Extranet.

This scenario is part of the design of the CorasWorks Department Solution Set. Any person in a department can create an announcement. A Department manager has the control to flag the announcement as company-wide which then automatically appears in the corporate news that is available across the environment.

## **Publishing Workstream Controlled by the Source (the department)**

In this scenario, instead of a workflow process, you are implementing a publishing workstream where the contributors drive a process where the announcements are moved from their local data source to a central data source. The person controlling the source (such as a Department Administrator), controls what information is published. The Announcement service itself is just a delivery service.

Imagine that you are in an IT Department and you have a list of announcements and you wish to submit for publishing one or more announcements. You would create a CorasWorks publish action that would take the announcement and publish it to second list in the source site (the same department), such as the Public Announcements list. That list could have a SharePoint Approval process. In this instance, the

Announcement Service administrator would add the name of that second Announcements list, such as Public Announcements to the DirectoryList of their “portfolio” of departments that are contributing announcements. When the source owner publishes the item and/or marks it approved the Announcements service would deliver it.

## **Publishing Workstream Controlled by the Announcement Service Administrator**

You can also create a scenario where all submissions are centrally controlled by the Announcements Service administrator, even though the source announcements are distributed in various departments.

In this case, each of the source departments would be using the workstream noted above where they are internally publishing announcements to the Public Announcements list. However, for this list they would not be marking the item as Approved.

When items are published to the distributed Public Announcements list, the Announcement Service manager would see it in a display in the announcement service and be notified by email of such. They would then use the display and go to the item, review and mark it as approved. They are doing this from within the Announcements service in a central location, yet, they are actually working on the distributed announcements lists across all of the departments.

### **To implement this scenario:**

- You must have the CorasWorks Workplace Suite.
- You would create a Grid Display in the Announcements service that uses the DirectoryList for its data sources.
- It would show all of the Announcements that are marked as Pending, based upon the standard SharePoint approval process.
- The CorasWorks Publish action referenced above, would have email notification turned on and would send an email to the Announcement Service manager when it publishes items to the Public Announcement list. These actions are created and managed using the CorasWorks Action Wizard.

## SharePoint-to-SharePoint Integration Scenarios

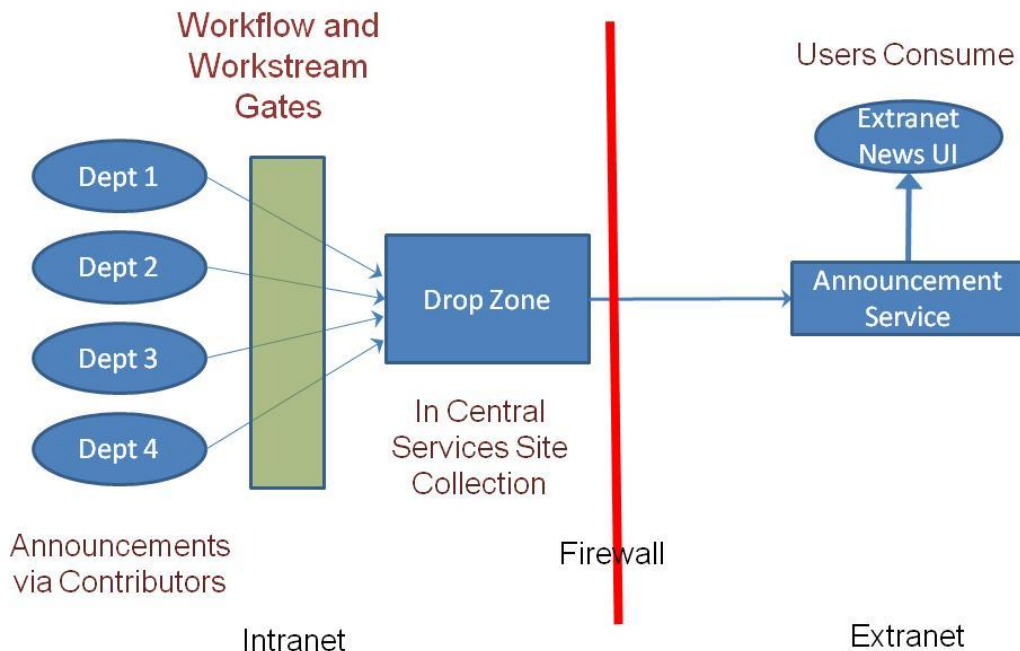
We now have a backdrop of the X design pattern and basic ways that people can manage the flow of items contributed into a state where they are ready for publishing to an Extranet. Now, we will look at the Intranet-Extranet integration. We will start in a scenario that builds on the previous example to take the next step of pushing information from within the Intranet into the Extranet. From there we will start to look at reversing the flow and go from there.

### Intranet to Extranet – Push Workstream

Here we are looking at extending the Intranet functionality to push information not back to other Intranet users but instead to push the information past the firewall and into an Extranet environment running in the cloud.

The scenario is that you are running an Extranet Community, like the Omega Community built with Spirit CSS, on a separate server farm on SharePoint outside of the firewall – perhaps at a third party hosting provider. You would have the SharePoint platform and the CorasWorks Application System on both farms. You may have the Spirit Community Services Suite in the Extranet environment, and, be using the CorasWorks Department Solution Set for your Intranet. Now, you want the Announcements from the Intranet pushed out into the Extranet in a programmatic way.

Specifically, let's assume that you have four departments that are publishing news and announcements for the Extranet. They go through an internal process and end up being consumed by Extranet users. Below is a schematic that depicts this architecture with the flow going from left to right.



This design uses a special purpose site in the middle called the Drop Zone. The approved announcements from the departments get published into the Drop Zone which automatically pushes them out to the announcement service in the Extranet. The Drop Zone is a central resource that lives within the CorasWorks Central Services site collection. What we have done is inserted a “black box” in the middle to handle the exchange of information from the Intranet to the Extranet.

The implementation of the Intranet to Extranet system above works like this:

- Inside the Intranet you have your Central Services Collection.
- Within Central Services, you deploy a Drop Zone template. This site acts as a staging and delivery service to push announcements to the Extranet.
- The Announcements list in the Drop Zone site has an additional special CorasWorks custom field called Database Writer. This field, a capability that is part of the CorasWorks Toolset, acts as an automated publishing service with Create, Update, and Delete capabilities. It is a one way service.
- The Database Writer is connected to the Announcement Service that is residing on the Extranet farm. This connection involves the DB Writer connected directly to an announcements list that is part of the service in the Extranet.

That is the basic setup. You then have one or more approval gates whereby announcements in the Intranet go through their flow and are eventually all dropped into the Announcements list in the Drop Zone. The DB Writer then pushes the announcements out into the Extranet. The Announcements Service then does its normal job of transforming the incoming information and serving it up to the users in a web-based UI.

The process happens behind the scenes. If you don't have human gates in the flow, the actual process will occur almost instantly.

## **Extranet from Intranet Connections - Pull**

The above scenario is most common in situations where you have a firewall in place where you do not want external users to access the Intranet. Thus, it is a push design, where information is pushed from the Intranet to the Extranet.

Alternatively, you can also cross the Intranet to Extranet boundary using a pull scenario. In this scenario, users in the Extranet are allowed to have limited read access to the Drop Zone or another type of site. In this scenario, an implementation of the Announcement Service in the Intranet would be adequate since you do not require the DB Writer functionality to push information to the Extranet.

The other parts of the system would function as above. As information is feed into the Announcements service, the information is instantly viewed via the Announcement Service in the Extranet. In this scenario, the information is not moving but being read by the Extranet users.

This approach is implemented by using CorasWorks External Data Providers in the Drop Zone that output information that is read by the Extranet Announcement Service. This output is read as an XML data feed, mashed up with announcements in the Extranet, transformed, and presented to the user.

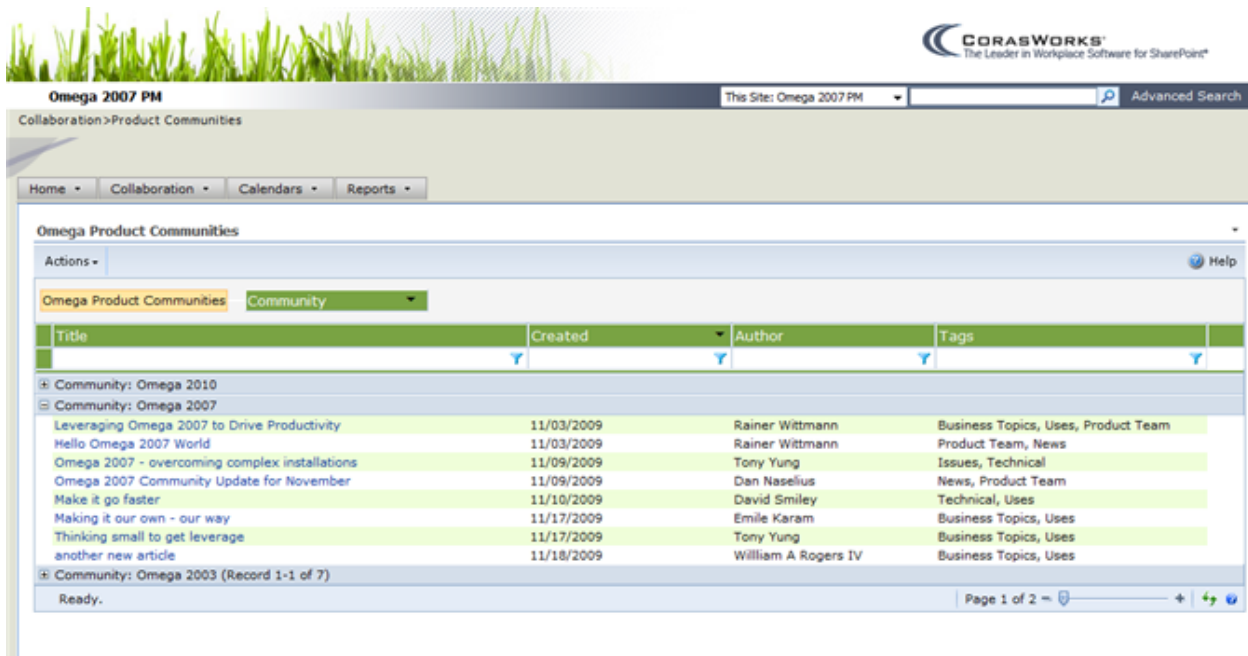
An important note is that the individual user in the Extranet does not have direct user-credentialed access to the Intranet. The Announcement Service, and specifically, the EDPs of the service have their own read only credentials for authentication to the Drop Zone site within the Exchange Site Collection. Thus, all users are readers with the same credentials. For security, these credentials can be stored in the Extranet webconfig.

## Intranet >< Extranet Connections – Pull and Push

Thus far, we have been talking about information flowing within an Intranet and/or out to an Extranet. It is simple and easier to reverse the process. In this scenario the users within the Intranet want to see and work with information that is coming from the Extranet. Thus, they are pulling and pushing (the >< syntax) information back and forth between the zones.

Imagine that you deploy an Extranet Community in the Extranet environment. It has multiple micro-communities where external users can write articles and comment on articles. Within the Intranet, you want to be able to see an aggregated view of the activity in the Extranet environment. You also want to be able to make comments on the articles – from within the Intranet.

Below is a screenshot of the Omega 2007 product team site within the Intranet built with CorasWorks. It shows information from multiple Group Blogs (microcommunities) from the Extranet.



The screenshot displays the Omega 2007 PM Intranet interface. At the top, there is a navigation bar with "Home", "Collaboration", "Calendars", and "Reports" menus. The main content area is titled "Omega Product Communities" and features a table of articles. The table has columns for Title, Created, Author, and Tags. The articles listed are:

Title	Created	Author	Tags
Community: Omega 2010			
Community: Omega 2007			
Leveraging Omega 2007 to Drive Productivity	11/03/2009	Rainer Wittmann	Business Topics, Uses, Product Team
Hello Omega 2007 World	11/03/2009	Rainer Wittmann	Product Team, News
Omega 2007 - overcoming complex installations	11/09/2009	Tony Yung	Issues, Technical
Omega 2007 Community Update for November	11/09/2009	Dan Naselius	News, Product Team
Make it go faster	11/10/2009	David Smiley	Technical, Uses
Making it our own - our way	11/17/2009	Emile Karam	Business Topics, Uses
Thinking small to get leverage	11/17/2009	Tony Yung	Business Topics, Uses
another new article	11/18/2009	William A Rogers IV	Business Topics, Uses
Community: Omega 2003 (Record 1-1 of 7)			

The interface also includes a "Ready." status bar at the bottom and a "Page 1 of 2" indicator.

When you click on a link for an article within the Intranet, you get a pop-up with the article from the Extranet. You can review it and make comments from within the Intranet – without having to go anywhere. While you are working within the Intranet, you are actually working with information residing out on the Extranet.



This integration would be implemented as follows:

- The Microcommunities/Group Blogs in the Extranet would remain as they are. They are configured with EDPs that natively output information in the form of XML data feeds.
- Within the Intranet Drop Zone, you would have a site, often called a Data Service site. Here there would be another External Data Provider. It is configured to connect to the different data feeds in the Extranet and aggregate these feeds.
- The Drop Zone also contains the Group Blog XSLT files to transform the XML feed into the pop-up shown above. This is done so that the system doesn't have to fetch this configuration information from the Extranet.
- Within the Intranet, there would be a Workplace Suite display (using the Data Integration Toolset view option) that is configured to access the EDP in the Intranet Drop Zone. Thus, the users within the Intranet would have a display wherever they work that shows the activity in the Extranet.

This scenario shows how you can reverse the process and go from Extranet to Intranet and then back again. Thus, the Drop Zone site in the Central Services Site Collection is serving as the place supporting bi-directional flow of information between the Intranet and the Extranet.

Again, in this scenario the information is staying in one location - the Extranet. So, this is neither a workflow nor a workstream, it is a cross-farm connection. This cross-farm connectivity is made possible by the core CorasWorks External Data Providers or SharePoint List Data Providers and the

standard of converting data into simple XML that can be read and acted upon (read-write) in both directions.

This basic scenario can be also applied to integrate branches of an organization via peer-to-peer connections or a hub and spoke design. It can also be used as a method to integrate an organization with multiple external organizations in a B-T-B context using the “extranet” as a hub for the exchange of information.

## Extended Integration Scenarios

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In this section we go beyond working with SharePoint data. Classically, Extranets were built as separate database applications using a custom database for the Extranet scenario and/or leveraging existing enterprise applications such as a CRM or ERP.

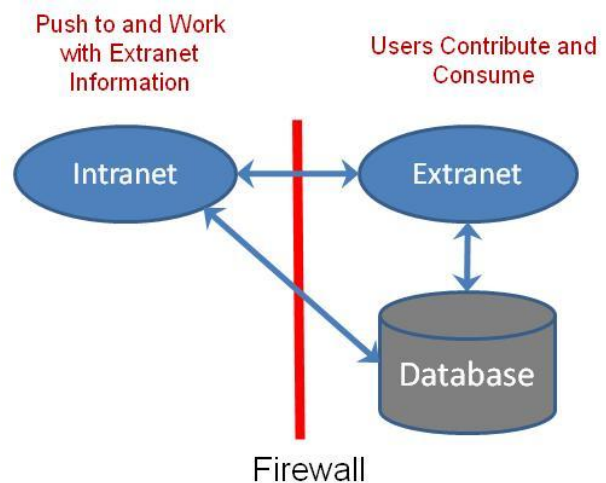
The world has evolved a bit over the last 10 years and you now have additional options such as tapping into applications running as a service in the Cloud such as Salesforce.com or separate application development environments in the Cloud such as Azure or any number of individual web services in the cloud that you may want to leverage such as Twitter, Hoovers, Google Earth or Microsoft Bing Maps.

When using the Toolset, while the scenarios are different you are able to use the same technology set to work with these disparate types of information and services.

In this section, we will cover some standard scenarios. However, note that in most more complex implementations you will often combine the different scenarios.

### Custom Database in the Extranet

Imagine that you want to build an Extranet that will have some SharePoint data and principally a dedicated database. A common scenario is where you want to use this database to capture registrations for events or for becoming a member of an extranet. Another is where you want customers to enter service requests. The users have forms and enter their information and then have access to this information. This is shown here.



Using CorasWorks, the database information is simply output as XML and available in a read/write manner for data entry and displays. This capability crosses the boundaries of the firewall. Users within the Intranet can see the information in the Extranet database and then can work with it there, such as updating the status of a service request.

Since, the information is in a database you would be using the CorasWorks Toolset External Data Provider. You can create multiple connections for a single data provider. Thus, users from both the Extranet and the Intranet may be using the same connections, yet, they will typically be performing different actions.

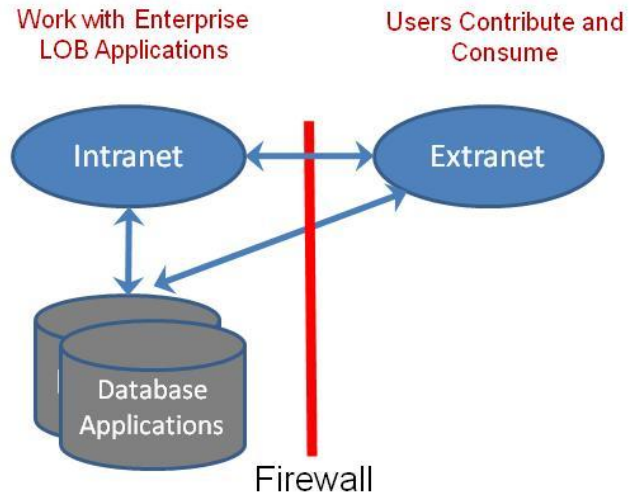
In this scenario, authentication by both groups is required. However, there is less concern by the organization about security since the database is outside of the firewall.

## LOB Database Applications in the Intranet

Now, let's reverse the architecture as shown here. This is the typical approach when you determine that you want to integrate the Extranet with internal enterprise Line of Business applications. You are seeking a "single source of truth" solution.

The most common LOB apps are CRM and ERP. In addition, most organizations have at least one other custom, mission-critical LOB app within the enterprise containing information for users in the Extranet/Internet.

As these applications are housed and managed within the enterprise, they are behind the firewall. However, they are often not part of the SharePoint front-end, work environment. They are back-end applications.



The tricky part of this scenario usually revolves around the technical reality and the political perception of security. The CorasWorks Toolset supports a number of security mechanisms to access data such as Windows Authenticated, Custom Membership Providers, Kerberos, and Forms-based or Token Authentication. Most enterprise approaches and technologies are supported by CorasWorks. Due to some concerns, some organizations decide to use an ETL method to output data from these back-end systems to a temporary datastore used for this purpose.

From a CorasWorks perspective, this scenario is the most straightforward. The SharePoint Intranet front-end and the SharePoint Extranet front-end accesses and works with the data via the Toolset. The benefit is that you can create one set of CorasWorks data providers that serve as your XML API for both front-ends. Thus, the differences are not in the CorasWorks middle-ware, but, in the front-end displays and what actions are available to the users in the two different zones.

**NOTE:** Increasingly, enterprises are benefitting from the web service enablement of off-the-shelf enterprise applications. Over the last 3 years there has been great progress in the % of enterprise applications that are web service enabled. Since, the Toolset connects with any web service, this back-end work makes the implementation of the Toolset almost native for a SharePoint-based, front-end, Services Oriented Architecture.

## Adding Cloud Application Services

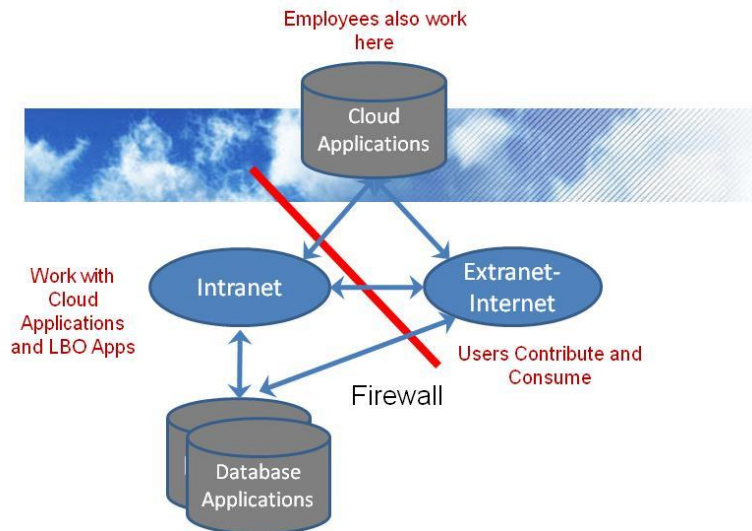
Few enterprise organizations now run their business without using some set of cloud-based datasources, applications, or services. In this scenario, we extend the previous scenario to bring in an external application service running in the cloud.

We assume that you have SharePoint-based front ends for both zones, and, they are both accessing an application service in the cloud.

And, they are both accessing the internal LOB applications.

For our example, let's assume that you are using Salesforce.com. You want to be able to do the following:

- Have prospects register for Events via your Internet web site with the data going into Salesforce.com (your CRM of record)
- Have your customers visit your Customer Portal (Extranet) that leverages help desk information in SharePoint (Intranet) tied to their customer record in Salesforce.com (a mash-up).
- Have your management be able to see and work with information in the Intranet from Salesforce.com and/or the database applications



This is starting to get into a complex scenario. In today's world it is more the rule than the exception. Fortunately, the technologies and methods used in the previous scenarios are the same when using CorasWorks. Here is how each requirement is implemented:

- In the case of External users accessing Help Desk information in a LOB app, it is the same as the previous scenario.
- In the case of Salesforce.com being used for Event registration, you are using an "impersonated" account to access this system and create events that have the data.
- In the case of Salesforce.com for use by Intranet users (authenticated users), Salesforce.com uses a form of token authentication which requires two trips for authentication – one to get the token and a second to authenticate to the data. This is supported by the CorasWorks Toolset. Thus, this is straight-forward for employees.

At the core, there are only a few items to keep in mind when working in a "complex" environment:

- Look at each scenario or task as a use case.
- When users perform tasks they may be authenticated in which case you need to have a permission/security layer, or, they will be impersonated – both are supported by CorasWorks.
- Using CorasWorks all information when accessed (read or write) is converted into simple XML which is then manipulated, mash-up, or transformed for the user.
- The UI's are your choice. In Intranet scenarios, users will typically use the CorasWorks UI because of its richer, Ajax enabled, feature set for automating tasks and their ease of point and click configuration. In web based UI's, usually you will use lighter weight UI's with less functionality and more extensive branding/customization, such as CSS styling.

## Summary and Next Steps

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This document has covered the basic design for Intranet and Extranet integration. Effectively, you are extending the same X design that can be used to tie contributors and consumers together within an Intranet context into the Extranet zone. The CorasWorks capabilities of the Toolset cross the separate server farm “structural barrier” to make these scenarios practical without requiring custom binary coding. You can drive activity in one direction or create bi-directional environments. You can have environments that use only SharePoint data or extend your data and/or applications to use just about any other data in the enterprise or the cloud. The key that when extending the scope you are still using the same toolset and components.

You will find video demonstrations of each of the SharePoint-to-SharePoint integration scenarios within the Learning Center of the CorasWorks Community. These scenarios are supported by CorasWorks with its off-the-shelf products. Please refer to the documentation and visit the CorasWorks Community for more information and to engage with the Community about your scenario.

The Extended Scenarios presented here are generally custom scenarios implemented using the CorasWorks Toolset. Refer to the Toolset documentation and training videos in the Learning Center for more information about using the Toolset.

In addition, you can request access to standardized building blocks such as the Drop Zone which require customization to meet your particular needs. You are able to do the customization without having to do custom binary coding. To perform the integration, you will have to be familiar with the CorasWorks Toolset and XML/XSLT. You will need to be familiar with CSS in situations where you are customizing web-facing UIs. Or, you can contract services from CorasWorks Professional Services or certified CorasWorks Engineers within our Partners.

For certain scenarios you can also leverage the Ready-for-Work apps in the CorasWorks App Store ([www.cwappstore.com](http://www.cwappstore.com)). For instance, the Spirit Community Services Suite referenced above is a robust solution with 4 core modules that enables you to deploy an Extranet Community, customized to your needs, using plug and play modules. It can also be used to augment your Intranet and Web Site with community oriented services. The CorasWorks Department Solution Set is available for use to build out your Intranet. The Central Services area of this solution allows you to centrally manage the work in the departments. It is also the place that will be leveraged for managing the flow between the Intranet and Extranet.

Lastly, CorasWorks is now available as a service in the Cloud via our joint venture with Fpweb.net. This means that you can bring up the Extranet environment outside of your firewall as a managed service. The AppServer offering of Fpweb.net provides the CorasWorks Workplace Suite and Toolset running on MOSS in a virtualized environment. This environment provides you with full control including RDP access and the ability to install custom code if you require it.