



LANTERIA HR: INTEGRATION WITH SHAREPOINT

Table of Contents

1	SharePoint Integration.....	3
1.1	Overview	3
1.2	Data Structure	3
1.3	Visual Components	3
1.4	SharePoint Programming Model.....	3
1.5	Security Model	4
1.6	Delivery and Deployment.....	4
2	Integration Schema.....	5

1 SharePoint Integration

1.1. Overview

Lanteria HR is a line of business system powered by the Microsoft SharePoint platform. The system is integrated with Microsoft SharePoint in 4 different ways:

1. Data structure;
2. Visual components;
3. SharePoint programming model;
4. Security model.

1.2. Data Structure

The system is using SharePoint data model to host its own predefined data structure in:

1. SharePoint lists - some lists have predefined content;
2. Document libraries - some document libraries have predefined content types with configured word documents for auto-generation.

1.3. Visual Components

The system deploys a number of visual components, including:

1. Web Pages – stored in the **SitePages** document library
2. Web Parts – stored in the SharePoint Web parts gallery
3. Delegate controls to customize the master page
4. JavaScript files
5. Stile sheet files
6. Images
7. Resource files for localization
8. ASP.NET web controls and handlers

1.4. SharePoint Programming Model

The system is actively using the SharePoint programming model (SharePoint Server-side object model) and implements the following:

1. Features – the application delivers its functionality in several SharePoint features, some of which are disabled by default;
2. Event receivers – the system has multiple web and list event receiver to handle data, send notifications and keep the data integrity;
3. Timer jobs – the system implements several timer jobs for the high load tasks to be processed as scheduled tasks;
4. Custom fields – the system provides several custom fields that are used in custom lists;
5. Custom SharePoint designer workflow activities – the system is using the SharePoint designer workflows to provide easy and customizable mechanism for notifications and

reminders. Some application-specific actions are implemented as custom workflow activities;

6. Web modifications – some modifications to web.config are registered on the farm level and any additional web front-end server will receive and apply them automatically.

1.5. Security Model

The system uses SharePoint users to allow login to the system and also grant or restrict access to the SharePoint objects (list, document libraries, list items, documents). Additionally, it creates custom role definitions and groups to grant access to the application resources (role-based access to the information).

1.6. Delivery and Deployment

The system is packaged as the SharePoint installation package (.wsp) and delivered as Lanteria.EffectiveStaff.wsp package with a set of PowerShell scripts to deploy it to the SharePoint farm. As far as application contains several .dll files deployed to Microsoft .NET GAC (global assembly cache), it must be installed as a full-trust farm solution.

When the application is deployed to the target SharePoint farm, it installs all the parts mentioned above to the relevant places (to the Farm, Application, Site collection and Web site levels). The application is deployed to a clean web site inside the existing SharePoint site collection.

2 Integration Schema

