



## INCIDENT MANAGEMENT USING LIGHTNING CONNECT TO CONNECT EXTERNAL DATABASES

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### Abstract

**Salesforce Lightning concept is used to create powerful, engaging applications with drag-and drop components for everything from standard fields, reports and charts, to partner built components from AppExchange marketplace, to your own custom designs.**

**Incident management describes the activities of an organization to identify, analyze, and correct hazards to prevent a future re-occurrence. Lightning Connect is used for managing incidents and lets seamlessly access data from external sources, side-by-side with the Salesforce data. We can also pull data from legacy systems such as SAP, Microsoft and Oracle in real time, without making a copy of the data in Salesforce. And it's all easily configured by a simple yet powerful point and click interface.**

### 1 INTRODUCTION

Universal Containers (hypothetical company) is one of leading “Software and Hardware” supply firm. It sells laptops with pre-installed softwares and provides support afterwards. It also has a support center hosted over Salesforce.com, leading cloud CRM platform. It servers following services through their support center. Currently they are managing their product information in SCCM database and have no direct integration with Salesforce.com for CI (Configuration Item) tracking. Whenever a client calls their support center, support staff has to manually check SCCM database for the reported item and update in Salesforce for status.

To resolve this breaking link, we are developing a connection tool with Salesforce.com and SCCM database to track CI using Salesforce

interface.

It will help them with following areas with their business

- Automated CI reporting based on the customer id ☐
- Increase staff productivity to resolve tickets quickly ☐
- Good turnaround time for customers ☐
- Customer satisfaction ☐
- More Business ☐

### LIGHTNING

The introduction of Lightning technology to the Salesforce1 Platform signifies another revolutionary shift in enterprise app development. Lightning provides a component framework and a new set of tools for developers and users to build apps, integrating data, and automating business processes faster than ever before.

To put this into perspective, Lightning is like Visual force, but different.

Visual force essentially enables us to modify HTML pages, plus some extra special sauce that lets us pull off a few other essential edits. That means being able to create Lightning apps/pages that don't require us to reload either another page or a new copy of the current page. It also allows for us to link up events for better communication between the individual components.

### COMPONENT SET

Lightning has the default/prebuilt component set. It allows you to start off with the Salesforce.com essentials that we consider standard. We don't know many developers who really end up using the prebuilt standard anything in Salesforce. But at least it gives people a place to start and possibly a very quick

developer experience if you stick close to the standards.

### **PERFORMANCE IMPROVEMENTS**

According to the literature and documentation, Lightning components are supposed to update individually without needing to send more data across the wire or refresh the entire page. On bandwidth-starved devices (like mobile), this might be a godsend. At the same time, it might be irrelevant if you have a massive bandwidth budget. Regardless, needing to update only the things that change is a nice feature.

### **EVENTS**

It basically tells us, “When this happens, do this.” And being able to use a publisher subscriber approach to connect events with handlers makes it easier to move data and commands around the application. All in all, I’d say a big win here.

### **CROSS-BROWSER COMPATIBILITY**

The first impression is that the cross browser compatibility is one feature of Lightning that could prove to be extremely useful. We’ve likely all ended up hunting specific browser bugs that waste mountains of our time. In theory, this should put an end to those issues.

### **ENCAPSULATION OF THE COMPONENTS**

The best thing about Lightning is the encapsulation of the components. In a normal Visual force page, you need to edit the whole page, for the most part. And if one thing changes, it might destroy the entire page in a fountain of fire and doom. With Lightning, as long as the external interface of the component stays the same, you can mess with the internals all you want. This has the glorious benefit of letting dev teams of more than one work in the same app, but not the same file. I can be working on my component over here and you can be working on your component over there, and we can totally avoid stepping on each other’s toes.

While we consider Lightning to be a satisfactory tool now, we know it will be continually improved, and we are looking forward to what it will become. If you have a decent mobile component to your Salesforce.com apps or like the idea of two developers being able to work simultaneously in a single VF page, there is definitely something here for you.

## **INCIDENT MANAGEMENT PROCESS**

Capture, track, and manage incidents

Manage your incidents like never before with a seamless workflow to reduce any sort of IT disruption. Start capturing incidents to your service desk and tracking their statuses right away. Easy for end-users to log in to the portal and raise a ticket whenever an issue arises.

### **Prioritize and organize incidents**

You are overloaded with ITIL tickets; you can’t handle them all at the same time. But with Fresh service, you can decide if the reported incident is urgent and needs to be addressed right away. Prioritize based on its importance and impact, and resolve accordingly. Start focusing on the urgent issues in a timely manner and tackle the less important tasks later.

### **Categorize the incidents**

When an incident is raised, it is issued to the right agent and team for efficient resolution. In order to provide prompt service, assign your best agent to the most critical and important issues. Categorize the incidents based on their priority, different skills, and specialization.

### **Knowledge base for known errors**

Your service desk encounters different types of incidents every day. If you start spending your precious time on trivial issues like resetting passwords, fixing router issues and faulty printers, then when will you tackle the potential threat disrupting your IT service? Now you can save your agents time with knowledge-based solution articles available on your self-service portal. Endusers can directly refer to them for FAQ's answers.

### **Automate your incidents**

Why invest your extra hours on sorting and assigning tickets when your service desk automation can take care of it? Set rules, specify the actions that need to be performed for certain scenarios, and start auto-assigning your incidents. Forget about getting knee-deep in mundane tasks when you can handle them with just a few clicks.

### **Diagnose the incidents**

The first step to resolve any issue is to diagnose the incident. You need to analyze them, find the impact, and symptom. Find an easy workaround once you’ve gone through the root cause analysis. Add them to the incident notes to know

about it in depth and find measures to rectify the same.

### **Escalate the incidents**

Some incidents are more critical in comparison to the common issues. Such incidents get escalated from first-level agents to the next level of support team for resolving the issues in a timely manner. Service Level Agreement (SLA) policies for your service desk determines the timeframe set up for every agent to respond to the incidents, and resolve tickets based on their priorities. This also set up a standard method to determine critical issues and enable escalations in good time for your support team to satisfy the end-users' request.

### **Incident resolution**

Review the incidents as soon as you find solutions to the issues. Ensure smooth functioning of the IT service before you close the critical tickets. Create a set of rules to automatically close all the resolved tickets. You can also interlink common incidents to specific problems with simple service desk automation rules and enhance your customer support productivity.

### **User satisfaction survey**

Identify the satisfaction level of the incident management tool's end-user and evaluate the performance of your support agents in resolving issues. Simply send across a survey form after every ticket closure. You can gauge and try achieving better results based on the generated results.

### **Incident Management Systems by other Companies**

#### **ZENDESK**

Zendesk, Inc. is a software development company based in San Francisco, California. The company provides a cloud-based customer service platform, also called Zendesk that includes ticketing, self-service options, and customer support features. It brings companies and their customers closer together. It makes it easy to support customers when they need your help.

#### **FEATURES:**

Priority to every case is given by support staff manually

Assignment of case is not to a particular technical staff but to a group of staffs.

They have a concept of organization profile that contains additional information that can be used to customize the support workflow.

Customers are assigned an organization  
Customers should have a username and password

Feedback contains just one question with two options

There are no ways in zendesk to see an incident which is not attached to a problem when creating a view.

#### **SERVICE NOW**

Service Now is a platform-as-a-service (PaaS) provider of enterprise Service Management (SM) software. Service Now Incident management streamlines the process of restoring service following an unplanned disruption. Incident management allows IT to capture incidents through a service portal, chat, email, phone, and incoming events and prioritize them based on agreed service level targets. Incidents can be automatically routed to the appropriate resolution group, complete with related information.

#### **FEATURES:**

In the Service Now base system, incident priority is determined by impact and urgency.

The most common integrations in Service Now are with CMDB, Incident Management, Problem Management, Change

Management, User

Administration, and Single Signon.

A variety of techniques can be used, most notably Web Services, JDBC, LDAP, Excel, CSV, and Email, as well as any industry standard technologies that use SOAP, REST, or WSDL. Additionally, API and command-line integrations can be done using a MID Server. Information can also be pulled from a data source using a direct JDBC connection, provided the network connectivity allows.

Information can be pulled from the platform to an external platform using an ODBC Driver. When the system attempts to send or receive an email that exceeds a reasonable total file size, performance issues may arise.

#### **FRESHDESK**

Fresh desk Inc. is a cloud-based software provider, headquartered in California.

**FEATURES:**

They have set up separate product portals with their required URLs.

Freshdesk provides support to multiple organization. Each of their agents is only responsible for one specific organization. But each agent is able to see solutions/forum contents of other organizations also.

**2 IMPLEMENTATION**

We are creating a customer web portal which will be accessible to all the customers by putting in their product's asset id. There will be OTP generation for authentication. Once logged in, the customers can generate a case (ticket), post a public query or even re-open a case. Cases will be saved in salesforce and will be assigned to the technical staff of the particular organization.

**3 LIMITATIONS**

- 1) Maximum external objects per org is 100.
- 2) Maximum joins per query across external objects and other types of objects is 4.
- 3) Maximum HTTP request size and response size for OData is 8 MB.
- 4) Maximum new rows retrieved per hour per external data source (This limit doesn't apply to high-data volume external data sources or to rows that have previously been retrieved.)

An org is limited to:

- 10,000 OData queries per hour for Enterprise, Performance, and Unlimited

Editions. Higher limits are available on request.

- 1,000 OData queries per hour for Developer Edition.
- Field history tracking isn't available for external objects.
- If a table row is deleted from the external system, the record feed for the external object record isn't deleted.
- Record feeds aren't available for Lightning Connect external objects that map to high-data-volume external data sources.

The following limits apply only to the Salesforce for Lightning Connect.

- The Salesforce adapter for Lightning Connect can access only queryable objects in the provider org. If you define an external object whose table name specifies an object that can't be queried, your users and the Force.com platform can't access that external object.

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