



Lithium: Collaborative Enterprise Ninja

So Seamless You Might Not Know It's There

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Cisco

ASA "ERROR: [address_range] overlaps with failover interface address" Received After Upgrade
Content Quality Factor: SILVER (21)
Kudos: 2 Links: 0 Views: 1645 External: 223
Knowledge Base: ASA Firewall
Status: [Published to Cisco.com](#)
Submitter: Anurag Singh (anurasin)
Contributors: mamorten, jaowens
Created: Fri, 14 Sep 2012 21:44:42 GMT
Age: 194 days old
External Comments: 0
Publisher: mamorten
Requested: 19-DEC-12 Externalized: 18-JAN-13



[Download the Slides!](#)

Cisco Services

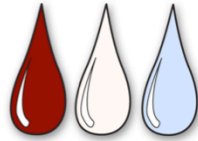
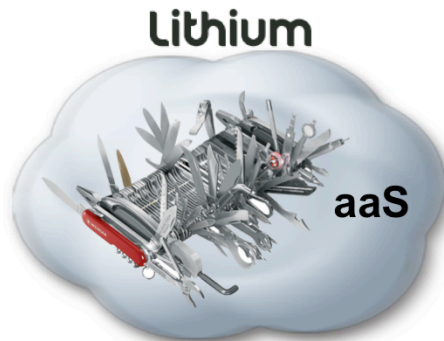
Cisco TAC - Who We Are

- High tech networking support organization
- 2600 professionals - combination of employees and outsourced delivery partners
- 730+ CCIEs; 400 patents issued
- 250,000 service requests handled quarterly
- TAC Support Capabilities: 180+ countries, 20 TAC facilities, 17+ languages

HELP!

Timely, accurate
issue resolution
from highly
qualified experts
with a rich history
of innovation

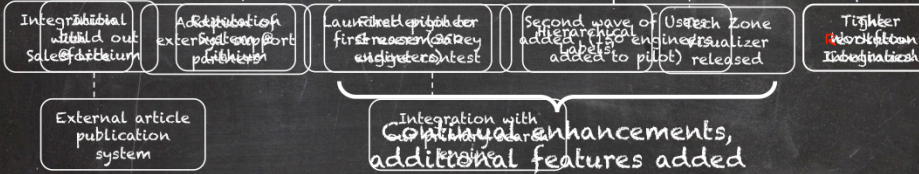
According To Legend..



Tech Zone Evolution



Jun 2011	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012
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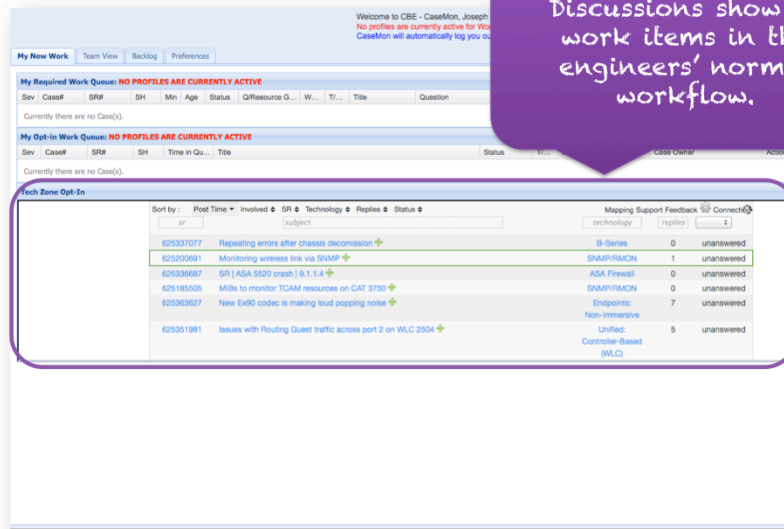


Results

- 1630 total users (across seven organizations)
- 190 external support partners
- 122 externally published articles
- 15,986 discussions, 66,279 replies, 7,636 accepted solutions, 7,247 articles created, 2,140 kudos awarded
- 260 articles created, 120 instances of release, 2,240 instances of release, 26,131 kudos awarded

Tech Zone in Salesforce

Discussions show as work items in the engineers' normal workflow.



- Used Node.js and NoSQL to build a live streaming list of threads relevant to the engineer
 - Relevant is determine by talking to a skills profile that maintains a list of engineers' technology skills
 - Thread data is fetched using the Lithium REST API and cached so that one can click the '+' icon to view post details without going to Tech Zone

Tech Zone in Salesforce

Subject: 1100653926 Clone

Routing Details: Technology: LAN Switching, Problem Code: Inoperability

Additional Contact Information: Mobile Phone, Additional Email

Opened Date: 2010-10-26 (883 days ago)

Accepted Date: 2012-09-19 (193 days ago)

Attachments: Attach New Files

History: 2010-10-26 18:50 JCLARKE Customer Symptom

Ad Ge Extra: Network Topology

- Seamless article creation from a case
- Helps engineers formulate effective case notes
- Topology diagram can be embedded into the article
- Automatic linkage between article and case
- Profit!

- Data is pushed from Salesforce into Tech Zone using HTTP POST parameters
- Within Tech Zone, and “invisible” widget is added to the TKB Editor page that intercepts the HTTP POST arguments using Lithium’s expanded Freemarker
 - E.g.: `<#assign symptom = http.request.parameters.name.get("symptom", "")?replace("","","\\"")?replace("\r", "")?replace("\n", "
") />`
- Inserting data into TinyMCE editors can be a bit tricky. Here is what we ended up doing:

```

tinyMCE.onAddEditor.add(function(mgr, ed) {
    ed.onInit.add(function(ed) {
        if (ed.id == 'tinymceeditor') {
            $('lia-message-template-symptoms-zone').find('lia-drag-content').prepend('${symptom}');
        }
    });
});

```

...

Externalization of Content

The screenshot shows a Cisco TAC document page titled "ASA 'ERROR: [address_range] overlaps with failover interface address' Received After Upgrade". The document ID is 115738, contributed by Anurag Singh and Magnus Mortensen, Cisco TAC Engineers, on Jan 18, 2013. The page includes sections for Introduction, Prerequisites, Requirements, Components Used, and Conventions. A purple overlay box on the left contains the following text:

- Content is incubated and vetted internally then pushed to Cisco.com for customer/partner use
- Engineers are made aware of the external link to share with customers
- Reputation is captured from Cisco.com and fed back to TZ

- Invisible widgets (using Studio) were added to various TKB pages that leverage jQuery to insert objects into the DOM.
- This allows us to add things at specific places even when the quilt is not that flexible
- The external publication queue is serviced by an off-box script that periodically connects to Tech Zone and uses a custom endpoint to pull the metadata that contains the list of articles to be published:

```
<#assign user_has_role = false />
<#list restadmin("/users/id/{user.id?c}/roles").roles.role as role>
  <#if role.name?? && ((role.name == "Administrator"))>
    <#assign user_has_role = true />
  </#if>
</#list>
<#if user_has_role>
  <#assign publish_list = restadmin("/settings/name/cisco.publish_list").value />
</#if>
<#if user_has_role>
  <#assign publish_list = restadmin("/settings/name/cisco.publish_list").value />
</#if>
```

Integrated Search

Topic Search

SIP trunk Search

CUCARE CDETS/DDTS News Tech Zone TS Training
 Latitude Dynamicsoft Starent Newscale ASApedia
 Tanenberg All

Search Term: route\$
75??
route*

Expands To: route, routes, routing, ro...
7500, 7503, 7513, ...
routemask, routeproces

Displaying top 500 clustering results

Click [here](#) to understand why the global hit counter was removed and to understand how the clustered count is calculated!

Tech Zone - [Video: T.38 Fax Troubleshooting with SIP Trunks](#) - Tech Zone - [NewWin](#)
 This is a short 5 minute video on troubleshooting T.38 fax when SIP trunks and/or CUBE are present. Cisco Internal Information ...
<https://techzone.cisco.com/t5/Fax-Modem/Video-T-38-Fax-Troubleshooting-with-SIP-Trunks/ta-p199142> - [Cached](#) -

Tech Zone - [624242467: Monitor calls on SIP trunk](#) - Tech Zone - [NewWin](#)
 ... Registered: 03-27-2012. 624242467: Monitor calls on SIP trunk. Options: ... Re: 624242467: Monitor calls on SIP trunk. Options: ...
https://techzone.cisco.com/cisco/board/crawl_message?board_id=uc_ms_cr_dialplan&message_id=62 - [Cached](#) -

Tech Zone - [Configuring CME to work with multiple SIP trunk providers](#) - [NewWin](#)
 I've come across quite a few cases which require the setup of multiple SIP trunk providers (SP) on CME, so I thought I'd post a sample config here ...
<https://techzone.cisco.com/t5/Communications-Manager-Express/Configuring-CME-to-work-with-multiple-SIP-trunk-providers/ta-p70448> - [Cached](#) -

- To add the metadata needed to enrich our internal search engine, we used Studio to insert HTML META tags into the page HEAD section (in Wrapper)
- For example:

<META NAME="views" CONTENT="{views}">

<META NAME="date" CONTENT="{date?string("MM/dd/yyyy HH:mm:ss")}">

<META NAME="lastupdatedate" CONTENT="{date?

string("yyyyMMddHHmmss'+00'00'")}">

<META NAME="searchdate" CONTENT="{date?string("dd MMM yyyy HH:mm:ss")}">

<META NAME="board_id" CONTENT="/boards/id/{coreNode.id}">

<META NAME="collection" CONTENT="Tech Zone">



- Greasemonkey is a great way to test changes to a Lithium community since they are local
- However, since Studio allows one to create components that are nothing but jQuery blocks, it is trivial to port Greasemonkey scripts as native Studio widgets

Borderless Support

The screenshot shows a Cisco Tech Zone forum page titled "Borderless Support". The page includes a header with the Cisco logo and "Tech Zone Access Request" button. Below the header, there are sections for "Announcements", "Access Request" (with a form), and a forum thread. The forum thread has a table of posts with columns for subject, replies, author, status, views, and latest post. A purple overlay on the left side of the screenshot contains the following text:

- Extending platform capabilities and access to include external partners in a seamless shared support model
- Enabling a new paradigm of collaborative support across corporate borders

- Using Studio, we created a completely customized page that users without the appropriate roles are forced to see
- Within the Tech Zone Wrapper (configured within Studio) there is a check to see what roles the user has
- If a specific role does not exist, they are automatically redirected to the authorization request page
- The Wrapper made it easy to put this on every page within Tech Zone
- Code:

```

<#assign has_role = false />
<#assign roles = restadmin("/users/id/${user.id?c}/roles").roles.role />
<#if roles?size == 0>
  <#assign has_role = true />
<#else>
  <#list restadmin("/users/id/${user.id?c}/roles").roles.role as role>
    <#if role.name?? && ((role.name == "4") || (role.name?matches("DSC_.*")))>
      <#assign has_role = true />
    </#if>
  </#list>
</#if>
<#if ! has_role && page.name != "TechZoneAccessRequest">
<@liaAddScript>
window.location = "/t5/custom/page/page-id/TechZoneAccessRequest";
</@liaAddScript>
</#if>

```

Hierarchical Labels (aka You Want These)

The screenshot shows the Cisco Label Manager interface. At the top, there's a search bar and navigation links. Below that is a table of labels with columns for Preferred Label, Alternate Label, Description, and Scope Note. The table lists various activities like Archiving, Backup, Configure, Debug, Deploy, etc. Below the table is a configuration form for a specific label, 'ACL'. The form includes fields for ID, Preferred Label, Alternate Label, Definition, and Scope Note. On the right side of the form, there are sections for Taxonomy and Dictionary, each with a tree view of hierarchical categories.

Preferred Label	Alternate Label	Description	Scope Note
Archiving			
Backup	Backups	Backup a systems or solutions configurat...	
Configure		The act of configuring an object	
Debug	Debugs,Debugging		
Deploy	Deployed		
Initialization	Initialize		
Install	Installation		
Integration	Integrate		
Manage			
Management			

ACL

(Use commas between labels)

- Managed using our Label Manager tool built on the Lithium RESTful API
- Engineers can adjust the taxonomy as new products or features are introduced

Tech Zone
Visualizer Demo



What Does the Future Hold For Tech Zone...?

Provide more exciting gamification

- Super User Perks
- Trophies
- Challenges

Drive more content creation and reuse

- Powerpoint import
- Content curation

Come See Us
In the Dev Zone

