

Discussion Forums - Clustering and...



[SuperSapinho](#) 16 posts since

Feb 27, 2008

Good afternoon,

Assumptions

- Customer is planning install of Oracle WebCenter Discussions in cluster and in two active data centers which have a distance of 300 km apart.
- It is clear for him how to install Oracle WebCenter Discussions in cluster, but not how to install Oracle WebCenter Discussions in two data centers that are going to be active, eg, every post in Discussions will be needed to be replicated between both data centers, supposelly.

Since the Discussion Forums clustering will have the Application servers with 300 Kms distance apart (eg, different data centers), there is a need to clarify some points.

Documentation

Clustering support in Jive Forums is described in Clustering Information (***clustering.html & forums-admin-guide.pdf***), included with the Jive Forums distribution.

<http://www.oracle.com/technology/software/products/ias/htdocs/101320ws.html> -- Oracle WebCenter Additional Services CD

1. Multi middle tier caching.

From the documentation:

In the middle-tier, cluster-enabled instances of Jive Forums are installed on multiple application servers Caches between the instances are synchronized automatically.

Question #1:

Is this required? Or can we work within an Application Server cluster without having the Oracle (Tangsol) Coherence caching enabled? What does it imply when this feature is not enabled?

Oracle Application Server uses Java Object Cache (JOC), while Jive Forums uses Oracle (Tangsol) Coherence. Is clustering done via Oracle (Tangsol) Coherence?

2. Database settings.

From the documentation:

All clustered instances of Jive Forums share the same database. This could be either a single database server or a cluster of database servers.

Question #2:

The documentation doesn't talk about any kind of database replication. Can we have clarifications on this? Is it possible to use database schema replication? What's Jive recommendation for 300 KMs distance between data centers, is a database cluster reasonable? Replication would seem to be a better solution, no?

3. Attachments

From the documentation:

Attachments are stored on the filesystem. All clustered servers must share a single attachments directory on network-attached storage. The default attachment directory is `jiveHome/attachments`. To use a different directory, set the "attachments" property in the `jive_attachments.xml` file on each server in the cluster to a common directory. Copy all existing attachment files to the new directory.

Question #3:

If the Application Servers are distant from each other, is there an other way to store attachments? Like database storage for attachments?

Per my understanding and reading out the documentation (*[clustering.html](#)*) this seems to be possible: "*Starting in Jive Forums 4.0, attachment data can be stored in the database. This is the preferred attachment storage mode when clustering is enabled.*" - How this can be accomplished / configured?

4. Must clustered servers reside on the same local network ?

From the documentation:

Yes. The clustering module uses IP multicast to discover the cluster, which requires all servers to reside on the same local network. If your configuration bridges separate networks, contact Jive

Software's Professional Services group for further assistance.

Question #4:

In the case the Application Servers host the Jive cluster and the instances are not located in the same local network, what kind of configuration is required?

Discussion Forums - Clustering and...

Cheers,

Pedro.

Tags: forums, 5.5.20, 5.1.0



Brad Heller 3,518 posts since

Jun 18, 2009 **1. Re: Discussion Forums - Clustering and Database replication** Nov 10, 2009 3:24 AM

Hey there,

Closing this as [it is a duplicate](#).

Cheers,

Brad



liug 46 posts since

Sep 11, 2002 **2. Re: Discussion Forums - Clustering and Database replication** Nov 9, 2009 3:23 PM

The link provided is broken. Can you please fix it? Thanks!



Brad Heller 3,518 posts since

Jun 18, 2009 **3. Re: Discussion Forums - Clustering and Database replication** Nov 10, 2009 3:25 AM

I've updated the link in my original post.

- Brad



liug 46 posts since

Sep 11, 2002 **4. Re: Discussion Forums - Clustering and Database replication** Nov 10, 2009 7:34 AM

I tried to click the link but got:

Unauthorized

It appears you're not allowed to view what you requested. You might contact your administrator if you think this is a mistake.

Our team is looking for a commercial solution for one of our new website, and we have the same questions as the original poster. Is it possible to grant me temp access, or PM me that hidden thread?

Thanks!



Brad Heller 3,518 posts since

Jun 18, 2009 **5. Re: Discussion Forums - Clustering and Database replication** Nov 10, 2009 7:52 AM

Because the duplicate is in a private space it's inaccessible to you, unfortunately. Here are the answers that were provided there.

- Any time you have more than one instance of Jive Forums hitting a database, Tangosol Clustering must be enabled. All of the caching and clustering within Jive Forums is handled by Tangosol.
- Replication will not work in this instance unless it is immediate as all Jive Forums instances must have the same view of the database at all times. In relation to item 1, these Forums instances must also be clustered.
- This can be configured in the admin console under Settings->Attachments. In fact it is highly recommended that all attachments be stored in the database in a clustered environment.
- All nodes of the Jive Forums cluster must reside in the same subnet. This is a limitation of the Tangosol caching layer. Tangosol requires >8ms response times from cluster nodes.

Hope that helps!



liug 46 posts since

Sep 11, 2002 **6. Re: Discussion Forums - Clustering and Database replication** Nov 10, 2009 9:00 AM

We are planning to have three datacenters in Asia, Europe and US, each with one load balancer and two instances of the forum. Each datacenter will have its own Oracle database and they are all replicated (multi-master). Geo-DNS is used so that people from different continent will hit the closest datacenter. Is this do-able with jive? If not, any other suggestions? Thanks!



[Brad Heller](#) 3,518 posts since

Jun 18, 2009 7. **Re: Discussion Forums - Clustering and Database replication** Nov 10, 2009 9:06 AM

To set up Clearspace or SBS in a clustered configuration the nodes have to reside on the same subnet due to restrictions with out cluster management layer. So you would need to join these networks via VPN to get this in place. If you load balance to individual clusters that write to the same DB you would need a custom plugin that notifies the applications in other geographic locations on a DB write such that those apps invalidated/updated their caches appropriately -- or you would need to disable caching all together, something that's not recommended.

You could get this to work, I think, but it would take some massaging.

- Brad



[liug](#) 46 posts since

Sep 11, 2002 8. **Re: Discussion Forums - Clustering and Database replication** Nov 10, 2009 9:16 AM

If we setup the VPN so that your cluster solution can cross-talk, is the large latency between continents ok? If the VPN goes down for a few minutes due to the WAN link, will your solution be able to recover? Is the notification plugin still needed if we have VPN?



[Brad Heller](#) 3,518 posts since

Jun 18, 2009 9. **Re: Discussion Forums - Clustering and Database replication** Nov 11, 2009 1:00 AM

The lag here would likely be a big issue, actually, knowing most VPN packages. Usually it doesn't take long for Coherence to time out so if there was extensive lag it likely would recover, but it would probably would be a bit rocky 😊.