Endeca Community Solutions
Properties and Dimensions
Dear Endeca Community user,

On July 31, 2015 we closed EndecaCommunity.com, and asked users to instead take advantage of the collaboration tools and communities now provided by Oracle.

Why we did this? Because EndecaCommunity.com has fulfilled its purpose.

We created EndecaCommunity.com to fill a temporary void, to support teams working with Endeca technology in both Commerce and Data Insight capacities. The intention was to provide continuity through the transition period that followed Oracle’s acquisition of Endeca, until Oracle had ramped up its own Endeca support community.

Now that Oracle’s Endeca communities and formal user groups are well established, it’s better for you as an Endeca user to find all the support you need from OAUG Special Interest Group and Oracle sources, rather than split your time having to cross-post to multiple disparate sites to find the answers you need.

We recommend joining the Endeca Community on LinkedIn or the OAUG Endeca Special Interest Group. More support for Endeca can be found on the Oracle community website at Technical Questions and Endeca Information Discovery.

On the following pages you will find the most frequently asked questions about Properties and Dimensions on EndecaCommunity.com and the best solutions as determined by members of the Community.

Thank you for taking advantage of EndecaCommunity.com and for trusting RealDecoy as your Endeca authority.

Sincerely,

Richard Isaac
President & CEO, RealDecoy
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Properties and Dimensions

Re-ordering dimension values

Q: I am looking for a cartridge that can be used to re-order dimension values. Is anyone familiar with such a cartridge in Page Builder?

A: I'm not sure about re-ordering all dimension values, but if you want a cartridge that can push some dimension values to the top of the list or drop them to the bottom, you may find the pbx cartridge GuidedNavigationBoostBury useful.

Why do I want to use a property instead of dimension?

Q: Why not use dimensions for everything?

A: You should not use dimensions for all values for a number of reasons.

Increase in indexing time: Dimensions are filters for your data, when you want to filter your data, it requires additional time to build the index to pre-calculate these filters. In the example of a movie data set, you would not want to index the name of every actor because the hundreds of thousands of names are not generally used for any form of filtering and will only increase the time it takes to produce an index.

Dimensions have a more complex structure: Properties are very basic constructs, essentially just key value pairs. Dimensions on the other hand are more complex and contain a lot more additional information - they have an associated dimension id, a value, a root and a structure (even a non-hierarchical dimension still has a very basic tree structure). This increased structure can add to the size of the response of each record.

A typical query to Endeca returns records AND the guided navigation (as well as other information). If all fields were dimensions, you'd be returning all values for all dimensions at the root navigation state. As a best practice, it is better to return only the required fields with the guided navigation (and while this can be somewhat controlled by the query itself, it's better to manage the clear examples from the back end). Returning ALL values for all dimensions in the guided navigation can be a huge performance issue.

Use dimensions for items you want your users to be able to navigate by - price range, color, size, etc. Use properties for more specific values such as name/title, item price, etc.
If two recspecs are the same which record will be used?

**Q:** If two recspecs are the same which record will be used?

**A:** The first record to be processed by Dgidx will be used. Subsequent records with the same record spec will be discarded. Each record that is discarded will be logged in Dgidx.log with a dump of all the properties and dimensions within that record.

```plaintext
<p>WARN 07/27/12 19:00:50.424 UTC (1343415650424) D gidx {dgidx,baseline}
Two records cannot share the value "&lt;Record Spec&gt;" for specifier property "p_recordSpec"; removing this record: [Record Id=1279485952]
Dimension[3,"Color"]: Value[4294965827] "Blue"
Property["Price"]: Value[0x1fb423f30] "1449.99"
</p>
```

With a large number of duplicate records, this will cause the Dgidx log to grow uncontrollably so it is best to try and avoid duplicate record specs.

Where are root dimensions defined?

**Q:** I was hired to work on a website that uses Endeca for navigation and have been reading through the documentation, but there's one thing I can't figure out. Do you manually choose the hierarchy of dimensions, or is that somehow automatically done for you? When I query at the root level I am returned a list of root dimensions. Where are these defined?

**A:** They’re defined in the Endeca XML config. If you want to change the properties of an Endeca Dimension, you’ll need to edit the config either using Endeca’s Developer Studio or the XML directly. After that, you’ll need to run a baseline update.

I wouldn’t use the term "root" Dimension. There are just "Dimensions". Values below a Dimension are called Dimension Values (a.k.a., refinements). So, how do you know which dimensions are the "root dimensions"? They are the Dimensions listed when you click on "Dimensions" in Developer Studio. If you double click one, you’ll see all the properties you can configure on a Dimension. If you click on "Values", you can define or view the values of a Dimension (assuming it's not an autogen Dimension).
**Condition in dimension value**

**Q:** Can somebody help me with this situation? For example if I want to get all products with a price less than $1,000 but more than $700, how do I configure this situation in pipeline or with Assembler API? Nothing should be predefined.

**A:** Range filters are probably what you want to use:

Analytics could solve your problem:
http://docs.oracle.com/cd/E28910_01/MDEX.622/pdf/AnalyticsGuide.pdf

EQL could also be used to solve your problem:

The problem with these methods is they have a performance cost. If you have lots of records and pageViews you could get into a performance issue unless you have a ton of infrastructure to compensate. I humbly suggest that you encourage the use of dimension ranges and avoid this functionality because of performance. You may find the performance impact acceptable, in that case fill your boots. At the least you should implement an “on/off' switch so you can remove the functionality during peak times to increase performance.

**Endeca dimension value id and Endeca dimension id**

**Q:** What is the maximum number of Endeca dimension value id and Endeca dimension id?

**A:** Essentially you can have up to the 4 billion range before it goes into the reserved spots for the auto generated id values. Rolling past that will cause errors.
How to sync dim ids in different Endeca applications?

**Q:** I want to sync (set the same ids for dimensions) two Endeca applications, I tried to sync `<app>/data/state file, but Endeca rewrites it after baseline_update. Is it possible to do it with the dimension id manager? As I read from manuals, it is possible to create it via cas-smd. Maybe I can run some components that reread `<data>/state and apply it to indexes?

**A:** A simple best practice: use externally managed taxonomy

http://docs.oracle.com/cd/E29585_01/PlatformServices.61x/ForgeGuide.pdf

I’d suggest writing a smaller pipeline to create the records (dimensions) you need. Then consume that output as input in your two pipelines. Or just write something in your favorite programming language that spits out your xml for the dimensions.

Another option: Configuration Import API  Configuration Import API - Included in the Tools and Frameworks package, the Configuration Import API is an ergonomic collection of interfaces that enable (java) programmatic management of Endeca dimensions, schema, and index settings. A quick Google search will show you the libraries. I haven’t personally used it but it may be an option for you. There are other ways to do things, but these are likely the recommended practices that will work after the next upgrade.

Can we have multiselect dimensions/refinements in Endeca?

**Q:** I have one requirement related to multi-selection of refinement values. For example: say refinement "SelectMe" has three values, say 1 selectMe1 2 selectMe2 3 selectMe3.

On the front end I need to use checkbox on these refinement values. If we use checkboxes, then users can check multiple checkboxes at a time, but as per my knowledge we can select only one refinement value at a time in Endeca, so that we can send its dimension id as selection.

Can we achieve this through Endeca directly?

**A:** Yes, we can have multi-select dimensions in Endeca. This is a common use-case for any search solution. (use-case like, dimension : brand, selections are "honda", "merc")

Please check out BasicDevGuide.pdf page #134 for more details.

**Why are some dimension not visible until I start filtering?**

**Q:** I have one dimension in particular (there may be more), let’s call this dimension A that is not visible on the left side as a refinement when I first hit the JSP Reference App (no filters applied yet). I then filter the record set by a dimension B. Then and only then does my dimension A appear in my list of refinements to choose from on the left side. Why is dimension A acting in this way?

What makes it even odder is that when I forge locally, the dimension A does appear on a "fresh" reference app screen but does not appear on the DEV forged version. I have entertained the possibility of the workbench playing some role in this difference but do not know how. Dimension A and B and others are external dimensions that get brought into the pipeline from an externally generated XML file and loaded via a Dimension Adapter. I have not configured this dimension in any different way than dimension B or any of the other dimensions that appear when I first bring up the reference app.

**A:** I guess you have precedence rule setup for dimension B. You can check this through developer studio.

**Endeca dimension properties access**

**Q:** Endeca allows us to create dimension properties which can be accessed through code or developer studio. Is there any way or tool, which can be used to access dimension properties, similar to the reference application? Which can be used for data verification on staging or production?

**A:** I’d just write a JUnit test to check them. You can pull them back with a dimension query and just write a couple of simple tests to satisfy that they’re working correctly. The ref app could be modified to display the dimension properties. You would have to customize it yourself to expose the dimension properties.

**Dimension present but not showing in left nav.**

**Q:** I am facing a situation wherein I am not able to see a particular dimension in the left nav (even in ref app it’s not visible) but the dimension shows up with the record information. Cross checking developer studio and other files does not show anything fishy with that dimension setup. There are 3 different dimvals associated with the dimension. Filtering also happens if we manually give the filter query. Can anyone point me to the probable cause for such behavior?

**A:** The most obvious answer; it sounds like an implied dimension meaning that selecting that dimension would not further refine the navigation. If this is the case you will not see this presented in the left nav.

Less likely: It’s also possible that you setup a rule rule in dev studio to hide it.

Even less likely: If you are using an older version of Endeca you may also be suffering a sampling issue.
**Or'ing 2 dimensions**

**Q:** I have a `currentState` dimension and a `previousState` Dimension that I want to search for people who live in (currentState) Texas OR have lived in (previousState) Texas. How best can I use Endeca do build this query using these 2 dimensions?

**A:** You could try building a navigation filter like this:

\[
Nr=\text{OR(person.currentState:Texas,person.previousState:Texas)}
\]

This way, the query will return all records that satisfies at least one of those two conditions.