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All queries processed on the EntityServer including named queries pass through the DevForce EntityServerQueryInterceptor or a custom EntityServerQueryInterceptor if you wrote one. This topic describes how you can distinguish between named and unnamed queries and intervene as you deem appropriate.

Your custom *EntityServerQueryInterceptor* can inspect properties of the *EntityQuery* to determine where it came from and how it was composed. You can alter the query or even change the query results before they are transmitted to the client.

Everything your interceptor could do to an unnamed client query it can do to the re-composed query derived from a named query.

Cast the query as an EntityQuery

The *EntityServerQueryInterceptor* handles every query that implements *IEntityQuery*. A typical first step is to determine what kind of query you are intercepting and respond accordingly. A named query is necessarily an *EntityQuery* so you might start by casting to *EntityQuery* as in the following example:

```
public class MyEntityServerQueryInterceptor:
        EntityServerQueryInterceptor
  protected override bool FilterQuery() // called before processing the query
     EvaluateEntityQuery();
    return base.FilterQuery();
  private void EvaluateEntityQuery()
     var entityQuery = this.Query as EntityQuery;
    if (null == entityQuery) return; // not an EntityQuery;
Public Class MyEntityServerQueryInterceptor
Inherits EntityServerQueryInterceptor
 Protected Overrides Function FilterQuery() As Boolean
   called before processing the query
  EvaluateEntityOuerv()
  Return MyBase.FilterQuery()
 End Function
 Private Sub EvaluateEntityQuery()
Dim entityQuery = TryCast(Me.Query, EntityQuery)
  If Nothing Is entityQuery Then 'not an EntityQuery;
  End If
 End Sub
End Class
```

Check IsNamedQuery

The EntityQuery.IsNamedQuery property returns true if

- · the intercepted query was constructed from a named query.
- the property is called on the server inside the EntityServerQueryInterceptor.

Otherwise EntityQuery.IsNamedQuery returns false and the other named-query-related properties discussed here return null or false.

The EntityServerQueryInterceptor.FilterQuery virtual method is a good place to check for named queries. If you require that all client queries be routed through named queries, you can throw a custom exception when IsNamedQuery is false.

You could add the following to the EvaluateEntityQuery method from the previous example:

```
if (!entityQuery.IsNamedQuery) throw new NamedQueryException("Not a named query");
```

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```
If Not entityQuery.IsNamedQuery Then
Throw New NamedQueryException("Not a named query")
End If
```

The EntityServer terminates query processing and transmits the exception to the client.

A more flexible approach is to maintain a whitelist of entity types which do not require named query methods. Throw the exception if the unnamed query isn't on the list:

```
Type rootQueryType = entityQuery.QueryableType; // the entity type being queried if (!(entityQuery.IsNamedQuery || UnnamedQueryWhitelist.Contains(rootQueryType)) throw new NamedQueryException("Not a named query"); }

Dim rootQueryType As Type = entityQuery.QueryableType ' the entity type being queried If Not(entityQuery.IsNamedQuery OrElse UnnamedQueryWhitelist.Contains(rootQueryType)) Then throw New NamedQueryException("Not a named query") End If
```

Properties of named queries

The following properties of the EntityQuery class return meaningful values on the server when the intercepted query is a named query.

Property	Description
OriginalClientQuery	The original query from the client exactly as it was received by the server.
NamedQuery	The query output of the named query method. This is the root of the query that the interceptor is evaluating.
NamedQueryMethod	The reflection <u>MethodInfo</u> of the named query method.
NamedQueryResultIsEnumerable	Is <i>true</i> if the query method returns an <i>IEnumerable</i> ; <i>false</i> if <i>IQueryable</i>

See the topics dedicated to the EntityServerQueryInterceptor to learn about other ways to intervene in query processing.