# Getting Information about Access Paths

Sometimes you need to get detailed information about a page accessing its adapter. Or, in other words: you want to get a detailed list of all the properties and objects which are referenced by your page definition to the corresponding adapter object.

For this reason, there is the class `CheckAccessPath` in the `com.softwareag.cis.server` package providing this information. The class has a `getInstance()` method to obtain an instance; the class has two additional methods:

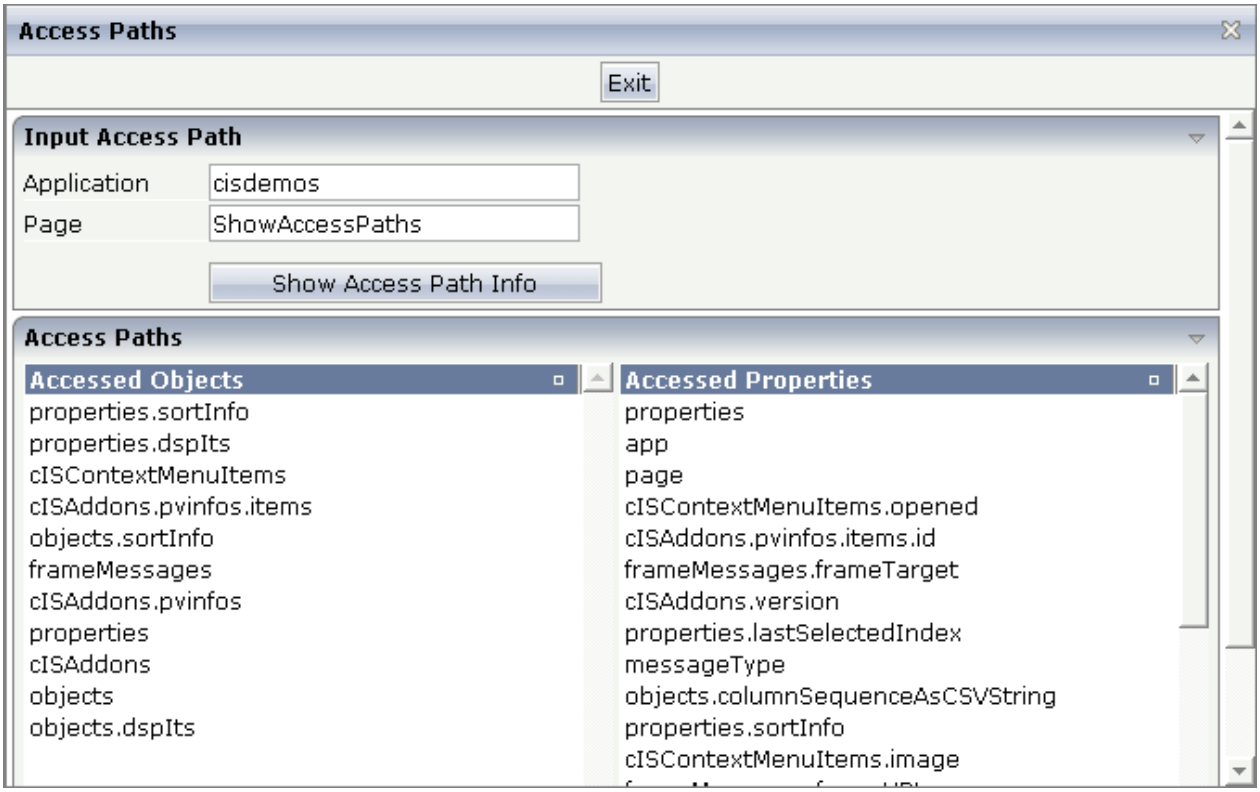
```
public String[] findAccessedObjects(String application,
                                    String reference);
public String[] findAccessedProperties(String application,
                                       String reference);
```

In both methods, the parameters are "application" and "reference". "application" is the application project in which a page is defined. "reference" is the name of the page itself, without ".xml".

The `findAccessedObjects` method returns a String array of all objects referenced in this page. An object is referenced if the properties are not directly plugged to the adapter itself but to subobjects. Example: if you bind a FIELD to the VALUEPROP "address.street" then "address" is the returned name.

The `findAccessedProperties` method returns a String array of all properties referenced in the page which are not complex properties, but simple value properties.

In the cisdemos project (which is part of the installation), there is a page "ShowAccessPaths" and the corresponding class `ShowAccessPathsAdapter` that shows an example of how to use the `CheckAccessPath` methods. The page allows you to enter the application name and the page name, and returns a list of referenced objects and properties:




In the class definition of the corresponding adapter, the code (finding the information about access paths) looks as follows:

```
// ---------------------------------------------------------------------------
// inner classes
// ---------------------------------------------------------------------------
 public class Info
{
    // property >objects[*].name<
    // property >properties[*].name<
    String m_name;
    public String getName() { return m_name; }
    public void setName(String value) { m_name = value; }
}

// ---------------------------------------------------------------------------
// property access
// ---------------------------------------------------------------------------

// property >app<
String m_app = "";
public String getApp() { return m_app; }
public void setApp(String value) { m_app = value; }

// property >page<
String m_page = "";
public String getPage() { return m_page; }
public void setPage(String value) { m_page = value; }

// array property >objects[*]<
TEXTGRIDCollection m_objects = new TEXTGRIDCollection();
public TEXTGRIDCollection getObjects() { return m_objects; }

// array property >properties[*]<
TEXTGRIDCollection m_properties = new TEXTGRIDCollection();
public TEXTGRIDCollection getProperties() { return m_properties; }
```

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```
// ----------------------------------------------------------------------------
// public usage
// ----------------------------------------------------------------------------

/** */
public void onShowAccessPath()
{
    // check
    if (m_app.trim().length() == 0)
    {
        outputMessage(MT_ERROR,"Please specify application project");
        return;
    }
    if (m_page.trim().length() == 0)
    {
        outputMessage(MT_ERROR,"Please specify page");
        return;
    }
    // fill data
    m_properties.clear();
    m_objects.clear();
    String[] objects = CheckAccessPath.getInstance().findAccessedObjects(m_app,m_page);
    String[] properties = CheckAccessPath.getInstance().findAccessedProperties(m_app,m_page);
    for (int i=0; i<objects.length; i++)
    {
        Info info = new Info();
        info.m_name = objects[i];
        m_objects.add(info);
    }
    for (int i=0; i<properties.length; i++)
    {
        Info info = new Info();
        info.m_name = properties[i];
        m_properties.add(info);
    }
  }
}
```