

Introduktion til visitkortsystemet i Sametime

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IntraVision

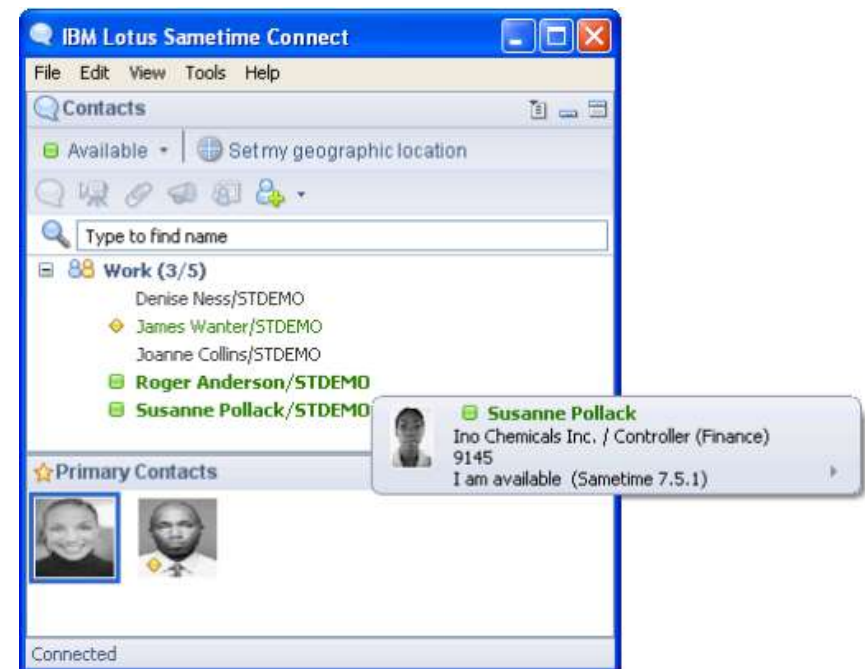
Om mig

- 31 år og hjemløs - pt. indsat i IntraVision
- Notes/Domino udvikler
- IBM Design Program for AppDev og Domino NEXT
- Sametime / Java / DB2 / web
- Aktiv blogger: lekkimworld.com
- Taler på Lotusphere
- En række artikler for THE VIEW
- LotusScript.doc / TwitNotes



Hvad taler jeg om?

- Sametime 7.5.x har mulighed for at vise visitkort for brugere når musen holdes over navnet
 - Hvor kommer denne info fra?
 - Hvordan sættes det op?
 - Hvordan fejlsøger jeg?
 - Hvordan udvikler jeg mine egne?
 - Hvorfor vil jeg udvikle mine egne?
 - Find selv på flere...

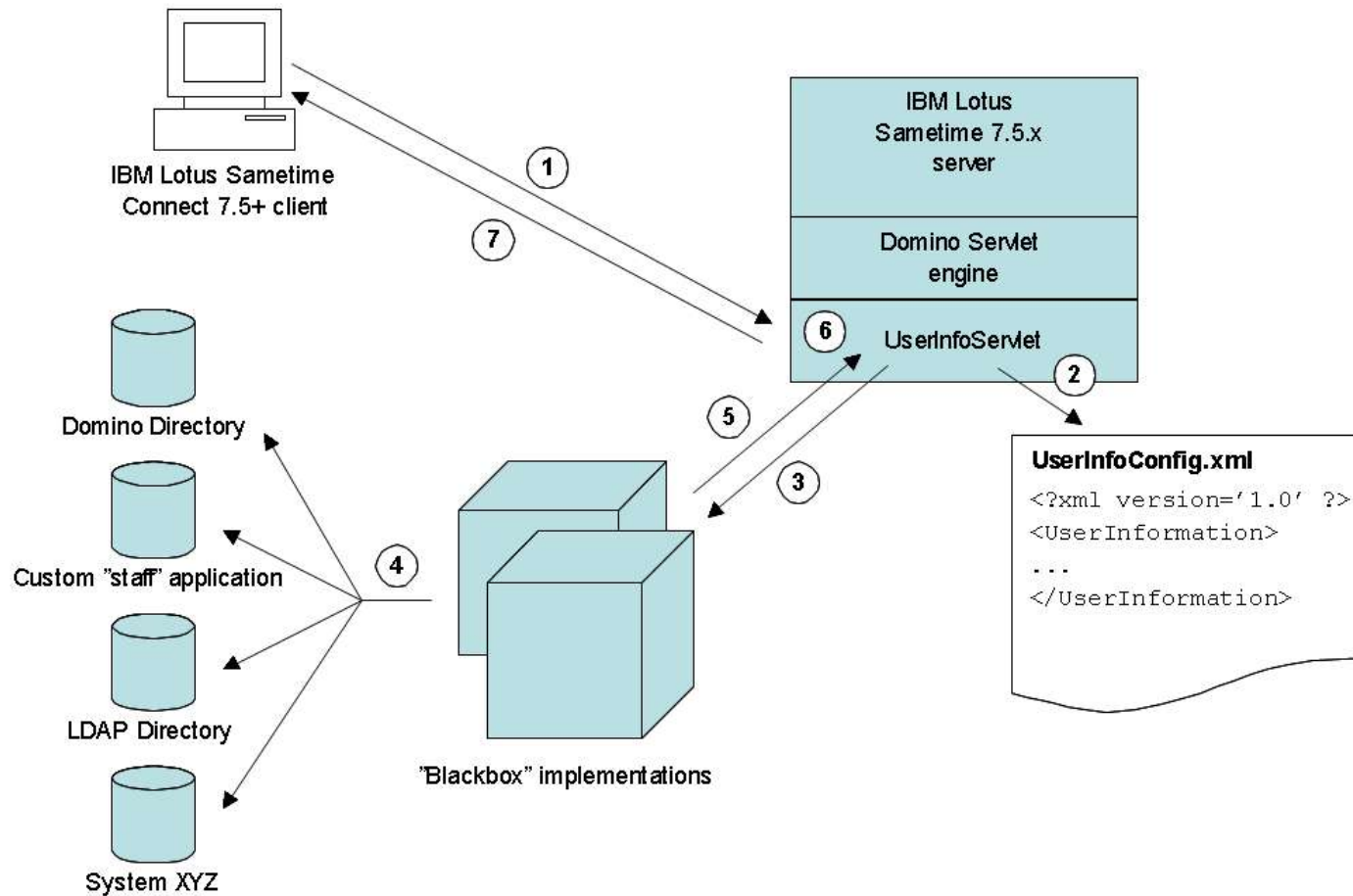


Hvem taler jeg til?

Terminologi

- UserInfoServlet
 - Java servlet
 - Kører på Sametime serveren
- UserInfoConfig.xml
 - One configuration file to rule them all!
 - Replikerer ikke!
- Blackbox
 - Java klasse baseret på interface
 - Bindeled mellem servlet og datakilde

Dataflow



UserInfoServlet

- Opsætning som en alm. Java servlet på Sametime serveren (servlets.properties)
- Konfigureret under installation af Sametime
- To grænseflader:
 - RPC / Sametime “channels”
 - HTTP/XML

UserInfoConfig.xml (1)

```

<?xml version ="1.0" encoding="UTF-8" ?>
<UserInformation>
  <ReadStConfigUpdates value="true" />
  <Resources>
    <Storage type="NOTES">
      <CommonField CommonFieldName="MailAddress"/>
      <Details>
        <Detail Id="Location"      FieldName="Location"      Type="text/plain"/>
        <Detail Id="Title"         FieldName="JobTitle"     Type="text/plain"/>
        <Detail Id="MailAddress"   FieldName="InternetAddress" Type="text/plain"/>
        <Detail Id="Telephone"     FieldName="OfficePhoneNumber" Type="text/plain"/>
        <Detail Id="Company"       FieldName="CompanyName"  Type="text/plain"/>
        <Detail Id="Name"         FieldName="FirstName,LastName" Type="text/plain"/>
      </Details>
    </Storage>
  </Resources>
  <ParamsSets>
    <Set SetId="0" params="MailAddress,Name,Title,Location,Telephone,Company"/>
    <Set SetId="1" params="MailAddress,Name,Title,Location,Telephone,Company"/>
  </ParamsSets>
  <BlackBoxConfiguration>
    <BlackBox type="NOTES"
      name="com.ibm.sametime.userinfo.userinfobb.UserInfoNotesBB" MaxInstances="4" />
  </BlackBoxConfiguration>
</UserInformation>

```

UserInfoConfig.xml (2)

```

<?xml version ="1.0" encoding="UTF-8" ?>
<UserInformation>
  <ReadStConfigUpdates value="true" />
  <Resources>
    <Storage type="NOTES">
      <CommonField CommonFieldName="MailAddress"/>
      <Details>
        <Detail Id="Location"      FieldName="Location"      Type="text/plain"/>
        <Detail Id="Title"         FieldName="JobTitle"         Type="text/plain"/>
        <Detail Id="MailAddress"   FieldName="InternetAddress"   Type="text/plain"/>
        <Detail Id="Telephone"     FieldName="OfficePhoneNumber" Type="text/plain"/>
        <Detail Id="Company"       FieldName="CompanyName"       Type="text/plain"/>
        <Detail Id="Name"         FieldName="FirstName,LastName" Type="text/plain"/>
      </Details>
    </Storage>
  </Resources>
  <ParamsSets>
    <Set SetId="0" params="MailAddress,Name,Title,Location,Telephone,Company"/>
    <Set SetId="1" params="MailAddress,Name,Title,Location,Telephone,Company"/>
  </ParamsSets>
  <BlackBoxConfiguration>
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```

UserInfoConfig.xml (3)

```

<?xml version ="1.0" encoding="UTF-8" ?>
<UserInformation>
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  <Resources>
    <Storage type="NOTES">
      <CommonField CommonFieldName="MailAddress"/>
      <Details>
        <Detail Id="Location"      FieldName="Location"      Type="text/plain"/>
        <Detail Id="Title"         FieldName="JobTitle"     Type="text/plain"/>
        <Detail Id="MailAddress"   FieldName="InternetAddress" Type="text/plain"/>
        <Detail Id="Telephone"    FieldName="OfficePhoneNumber" Type="text/plain"/>
        <Detail Id="Company"      FieldName="CompanyName"  Type="text/plain"/>
        <Detail Id="Name"         FieldName="FirstName,LastName" Type="text/plain"/>
      </Details>
    </Storage>
  </Resources>
  <ParamsSets>
    <Set SetId="0" params="MailAddress,Name,Title,Location,Telephone,Company"/>
    <Set SetId="1" params="MailAddress,Name,Title,Location,Telephone,Company"/>
  </ParamsSets>
  <BlackBoxConfiguration>
    <BlackBox type="NOTES"
      name="com.ibm.sametime.userinfo.userinfobb.UserInfoNotesBB" MaxInstances="4" />
  </BlackBoxConfiguration>
</UserInformation>

```

UserInfoConfig.xml (4)

```

<?xml version ="1.0" encoding="UTF-8" ?>
<UserInformation>
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      <CommonField CommonFieldName="MailAddress"/>
      <Details>
        <Detail Id="Location"      FieldName="Location"      Type="text/plain"/>
        <Detail Id="Title"         FieldName="JobTitle"   Type="text/plain"/>
        <Detail Id="MailAddress"   FieldName="InternetAddress" Type="text/plain"/>
        <Detail Id="Telephone"    FieldName="OfficePhoneNumber" Type="text/plain"/>
        <Detail Id="Company"      FieldName="CompanyName" Type="text/plain"/>
        <Detail Id="Name"         FieldName="FirstName,LastName" Type="text/plain"/>
      </Details>
    </Storage>
  </Resources>
  <ParamsSets>
    <Set SetId="0" params="MailAddress,Name,Title,Location,Telephone,Company"/>
    <Set SetId="1" params="MailAddress,Name,Title,Location,Telephone,Company"/>
  </ParamsSets>
  <BlackBoxConfiguration>
    <BlackBox type="NOTES"
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  </BlackBoxConfiguration>
</UserInformation>

```

Vågen?

Foto

```
<?xml version ="1.0" encoding="UTF-8" ?>
<UserInformation>
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  <Resources>
    <Storage type="NOTES">
      <CommonField CommonFieldName="MailAddress"/>
      <Details>
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        <Detail Id="Title"         FieldName="JobTitle"     Type="text/plain"/>
        <Detail Id="MailAddress"   FieldName="InternetAddress" Type="text/plain"/>
        <Detail Id="Telephone"     FieldName="OfficePhoneNumber" Type="text/plain"/>
        <Detail Id="Company"       FieldName="CompanyName"  Type="text/plain"/>
        <Detail Id="Name"          FieldName="FirstName,LastName" Type="text/plain"/>
        <Detail Id="Photo"         FieldName="UserPhoto"    Type="image/jpeg"/>
      </Details>
    </Storage>
  </Resources>
  <ParamsSets>
    <Set SetId="0" params="MailAddress,Name,Title,Location,Telephone,Company,Photo"/>
    <Set SetId="1" params="MailAddress,Name,Title,Location,Telephone,Company,Photo"/>
  </ParamsSets>
  <BlackBoxConfiguration>
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  </BlackBoxConfiguration>
</UserInformation>
```

Mere end en Blackbox

- Hvorfor vil man det?
- Blackboxes fra IBM
 - UserInfoNotesBB
com.ibm.sametime.userinfo.userinfobb.UserInfoNotesBB
 - UserInfoLdapBB
com.ibm.sametime.userinfo.userinfobb.UserInfoLdapBB
 - Fra 7.5.1: NotesUserInfoNotesCustomBB
com.ibm.sametime.userinfo.userinfobb.UserInfoNotesCustomBB

UserInfoConfig.xml

```
<?xml version="1.0" encoding="UTF-8" ?>
<UserInformation>
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  <Resources>
    <Storage type="NOTES">
      <CommonField CommonFieldName="MailAddress"/>
      <Details>
        <Detail Id="Location"      FieldName="Location"      Type="text/plain"/>
        <Detail Id="Title"         FieldName="JobTitle"   Type="text/plain"/>
        <Detail Id="MailAddress"   FieldName="InternetAddress" Type="text/plain"/>
        <Detail Id="Company"       FieldName="CompanyName" Type="text/plain"/>
        <Detail Id="Name"          FieldName="FirstName,LastName" Type="text/plain"/>
      </Details>
    </Storage>
    <Storage type="NOTES_CUSTOM_DB">
      <StorageDetails DbName="databases/photobook.nsf" View="lookupUsers" />
      <Details>
        <Detail Id="Telephone"      FieldName="PhoneNumber"      Type="text/plain"/>
        <Detail Id="Photo"          FieldName="UserPhoto"        Type="image/jpeg"/>
      </Details>
    </Storage>
  </Resources>
  <ParamsSets>
    <Set SetId="0" params="MailAddress,Name,Title,Location,Telephone,Photo,Company"/>
    <Set SetId="1" params="MailAddress,Name,Title,Location,Telephone,Photo,Company"/>
  </ParamsSets>
  <BlackBoxConfiguration>
    <BlackBox type="NOTES"
      name="com.ibm.sametime.userinfo.userinfobb.UserInfoNotesBB" MaxInstances="4" />
    <BlackBox type="NOTES"
      name="com.ibm.sametime.userinfo.userinfobb.UserInfoNotesCustomBB" MaxInstances="4" />
  </BlackBoxConfiguration>
</UserInformation>
```

IBM mener hvad de skriver!

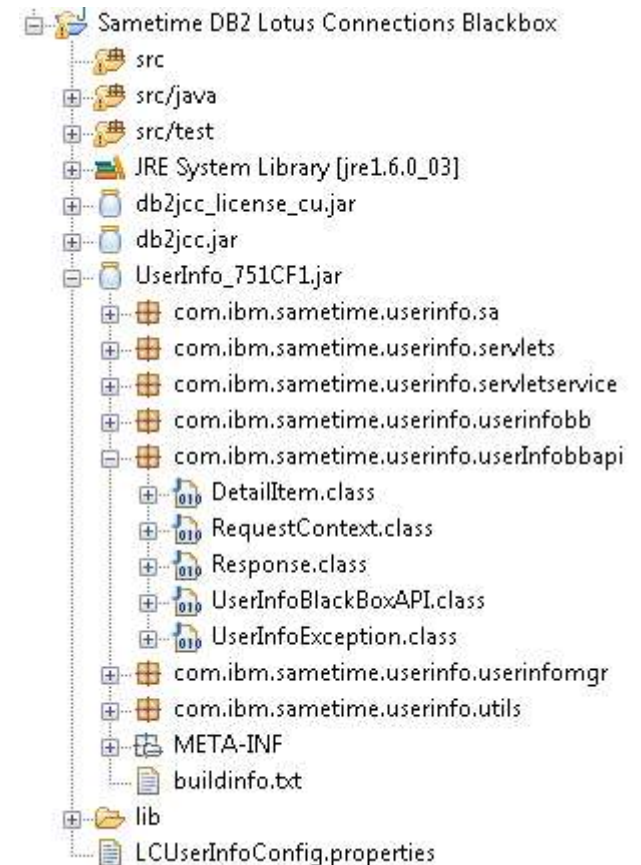
```

<?xml version ="1.0" encoding="UTF-8" ?>
<UserInformation>
  <ReadStConfigUpdates value="true"/>
  <Resources>
    <Storage type="NOTES">
      <CommonField CommonFieldName="MailAddress"/>
      <Details>
        <Detail Id="Location"      FieldName="Location"      Type="text/plain"/>
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        <Detail Id="MailAddress"   FieldName="InternetAddress"  Type="text/plain"/>
        <Detail Id="Company"      FieldName="CompanyName"     Type="text/plain"/>
        <Detail Id="Name"         FieldName="FirstName,LastName" Type="text/plain"/>
      </Details>
    </Storage>
    <Storage type="NOTES_CUSTOM_DB">
      <StorageDetails
        DbName="databases/photobook.nsf"
        View="lookupUsers" />
      <Details>
        <Detail Id="Telephone"      FieldName="PhoneNumber"      Type="text/plain"/>
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    </Storage>
  </Resources>
  <ParamsSets>
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    <BlackBox type="NOTES"
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    <BlackBox type="NOTES"
      name="com.ibm.sametime.userinfo.userinfobb.UserInfoNotesCustomBB" MaxInstances="4" />
  </BlackBoxConfiguration>
</UserInformation>

```

Blackbox API

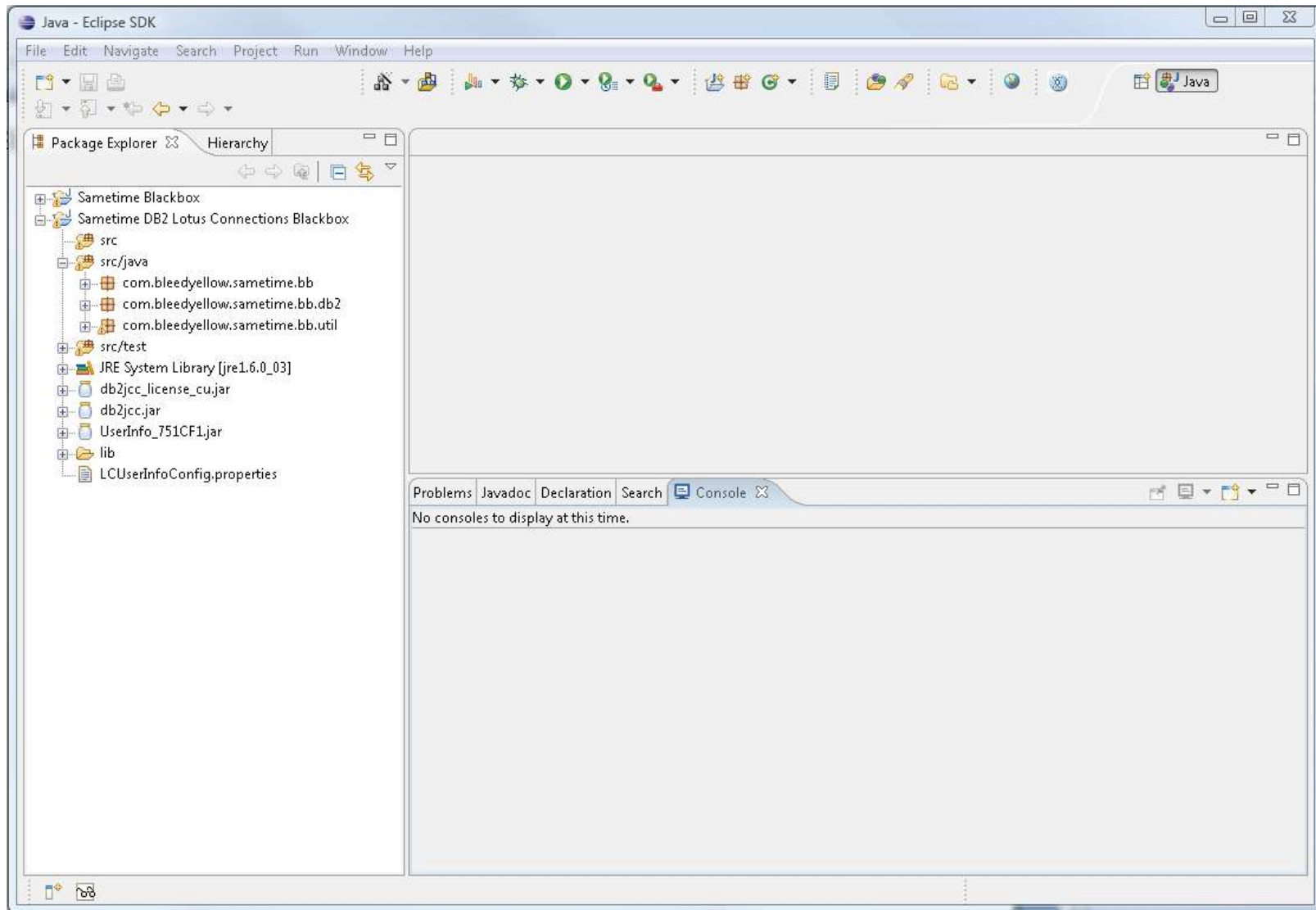
- UserInfo.jar på Sametime server
- UserInfoBlackBoxAPI
- com.ibm.sametime.userinfo.userInfoobbapi package
 - DetailItem
 - RequestContext
 - Response
 - **UserInfoBlackboxAPI**
 - UserInfoException



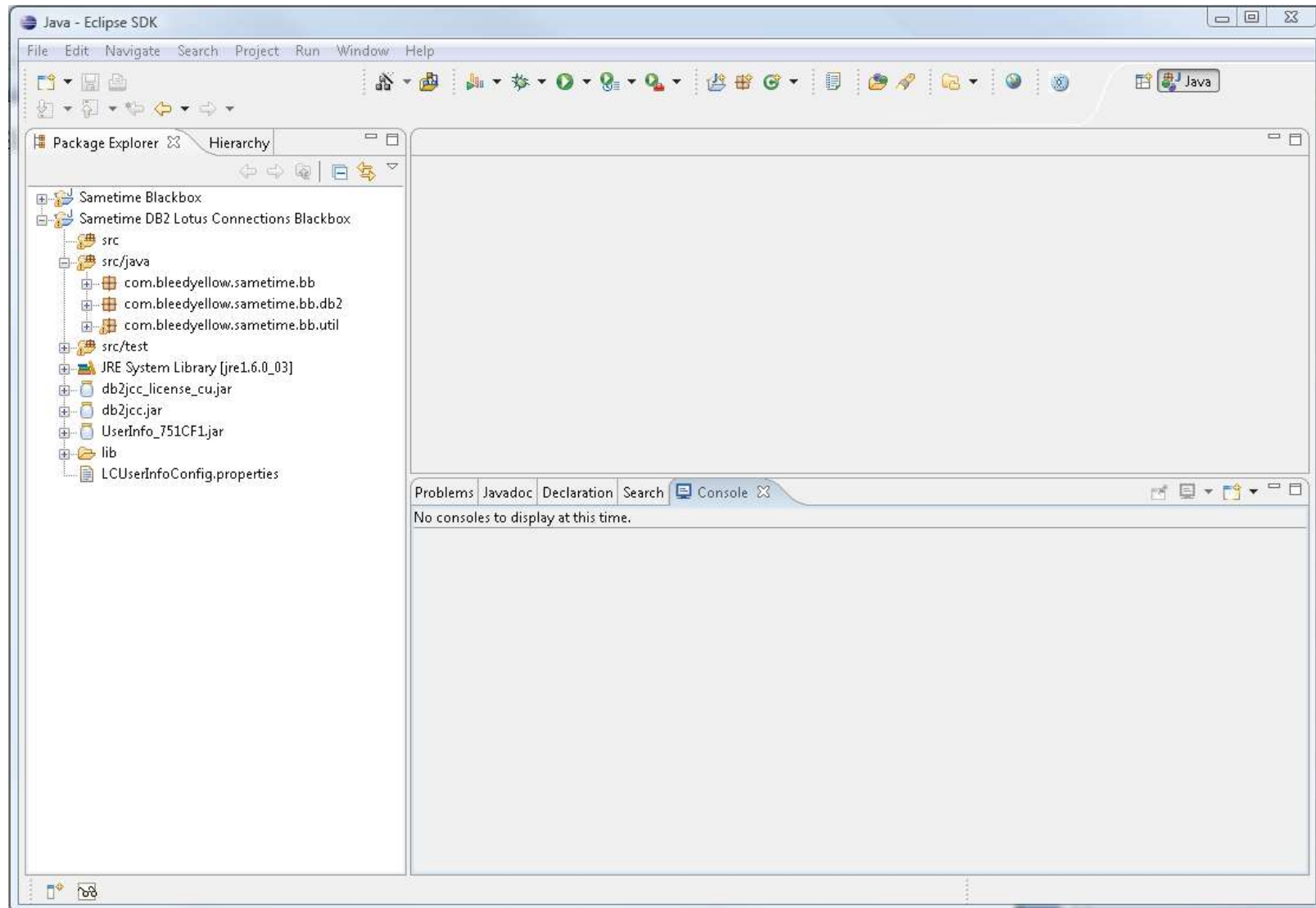
UserInfoBlackBoxAPI

```
import com.ibm.sametime.userinfo.userInfobbapi.RequestContext;  
import com.ibm.sametime.userinfo.userInfobbapi.Response;  
import com.ibm.sametime.userinfo.userInfobbapi.UserInfoException;  
  
public interface UserInfoBlackBoxAPI {  
  
    public void init() throws UserInfoException;  
  
    public Response processRequest(RequestContext requestcontext) throws UserInfoException;  
  
    public void terminate();  
}
```

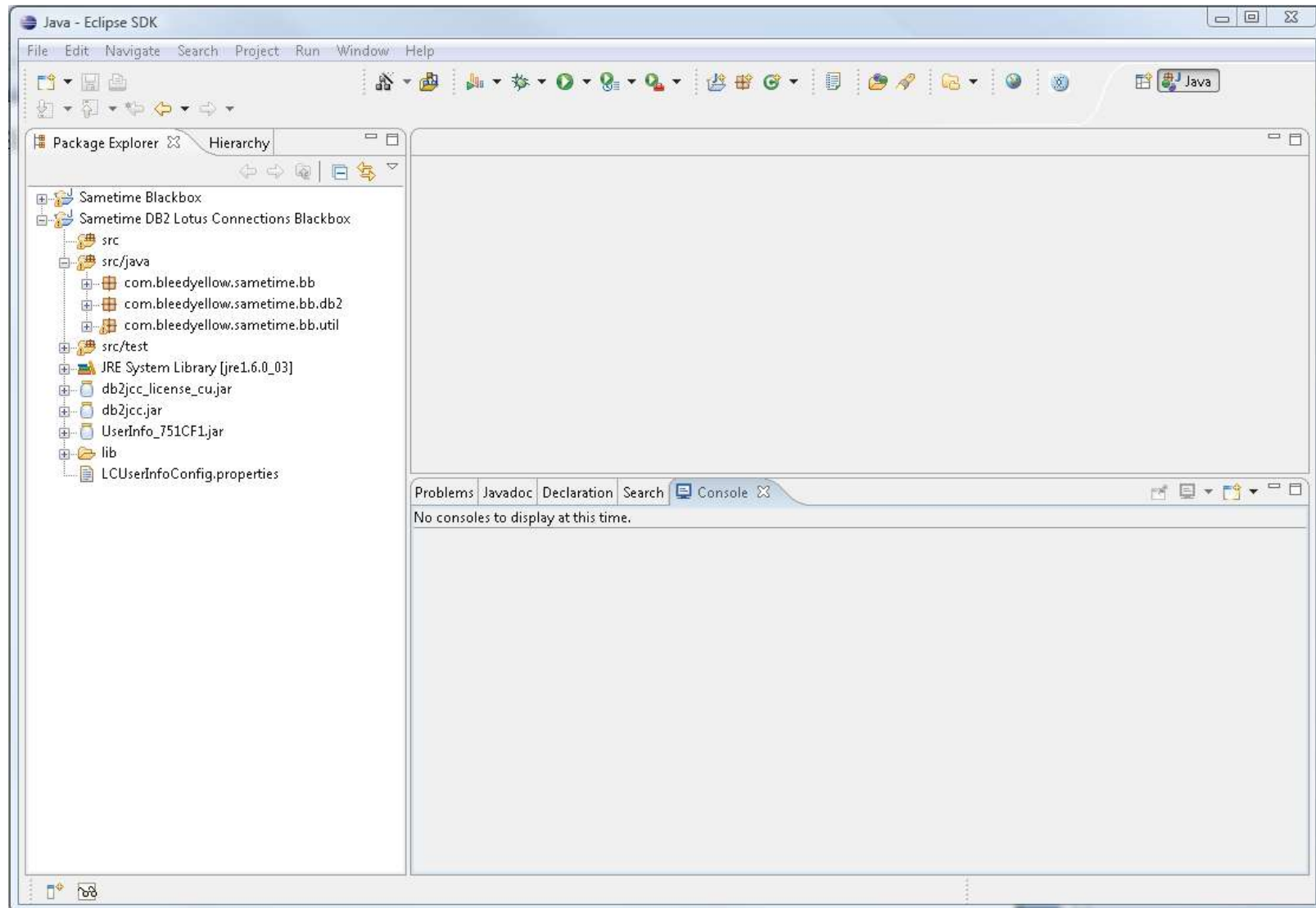
Demo 1 - hard coding



Demo 2 - data fra Notes



Demo 3 - data fra Connections



Debug

- Debug nemmest via XML interface til UserInfoServlet
- UserInfoServlet kan tage 4 argumenter:
 - operation (1, 2, 3)
 - userid (brugernavn som vist i (\$Users) view)
 - setid (vælger mellem konfigurerede sets; normalt 0 eller 1)
 - field?? (?? er et tal fra 1 og op)
- lekkimworld.com - Reverse engineering - <http://tinyurl.com/22n4lb>
- Bleedyellow.com - XML eksempel - <http://tinyurl.com/2hgst3>
- IntraVision - XML eksempel - <http://tinyurl.com/2baknt>

Referencer

- THE VIEW 2008 Technical Solutions Supplement - kort introduktion.
- THE VIEW, March/April 2008 - “Sametime business card configuration secrets, Part 1: Architecture and configuration”
- THE VIEW, May/June 2008 - “ Sametime business card configuration secrets, Part 2: Real-world example of creating a custom blackboxes”
- Setup business card photo on Sametime 7.5 server (<http://www.bingham.co.za/?p=41>)
- Blackbox API: “Chapter 5: User Information SPI” i stddatkdevguide.pdf (kommer med Sametime 7.5 SDK)
- <http://lekkimworld.com>

Spørgsmål?

- Ellers er jeg på im.bleedyellow.com...