IMAM - Instant Messaging Agent Manager

Tutorial

DRAFT VERSION!

by Semaphor

Content

Introduction

This tutorial will lead you through the creation of 3 simple agents.

The primary goal in this tutorial is to give insight in creating 3 "simple" agent that are not dependant on major preparation in your IT environment.

You will create the following:
- A XML based agent that searches the BBC News RSS Feed
- A Google based agent that searches the ibm.com website
- An ODBC based agent that searches an Excel spreadsheet

Prerequisites

Before you start the tutorial, you need the following:
- The IMAM product
- A connection to a Lotus Sametime community
- The ability to create Sametime accounts for the agents

The IMAM product

IMAM is used to design, manage and execute the agents.
It's a highlevel tool, so you don't need any programming skills.

Download the IMAM product

http://www.imam.dk/docs/download

Lotus Sametime community

The agents connects to a Lotus Sametime Community, and services users and applications connected to the community, either via mobile devices, chat clients or other clients.

Every agent is supposed to have its own Lotus Sametime account.

Installation

If you have downloaded the IMAM designer, you should be ready to install the product.

Before you install

Just some hints and tips:
- Start by reassuring that you meet the requirements

IMAM does not have to be installed on the Sametime server, it can run anywhere, as long as the agents can connect from there to a community.

Installing the product

- Download the trial, if you haven't done that yet
- Unzip the file to a location of your choice
- Start the imam.exe from the "imam" folder

Uninstalling the product

- Just remove the imam folder, thats it.

Before you start

In this tutorial we will need to create 3 Sametime accounts for the agents we will be creating.

Start by creating 3 Sametime account with the following characteristics:
- RSSAgent
  - Userid = RSSAgent
  - Password =password
- GoogleAgent
  - Userid = GoogleAgent
  - Password =password
- ProductAgent
  - Userid = ProductAgent
  - Password =password

TIP:

Because the agent names are only one word, not firstname and lastname, put the full agent name in the lastname field, and leave the firstname blank.

Make sure to test that you can login to Sametime via these 3 newly created credentials.

Create an agent project

First let's start out by creating an empty agent project.

1. **Start IMAM**
2. **Click the "New Project" icon, on the project tab.**
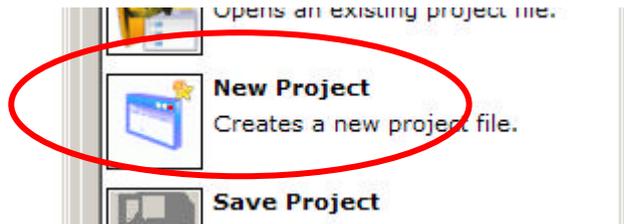
3. **Name the project file "MyAgents.project"**
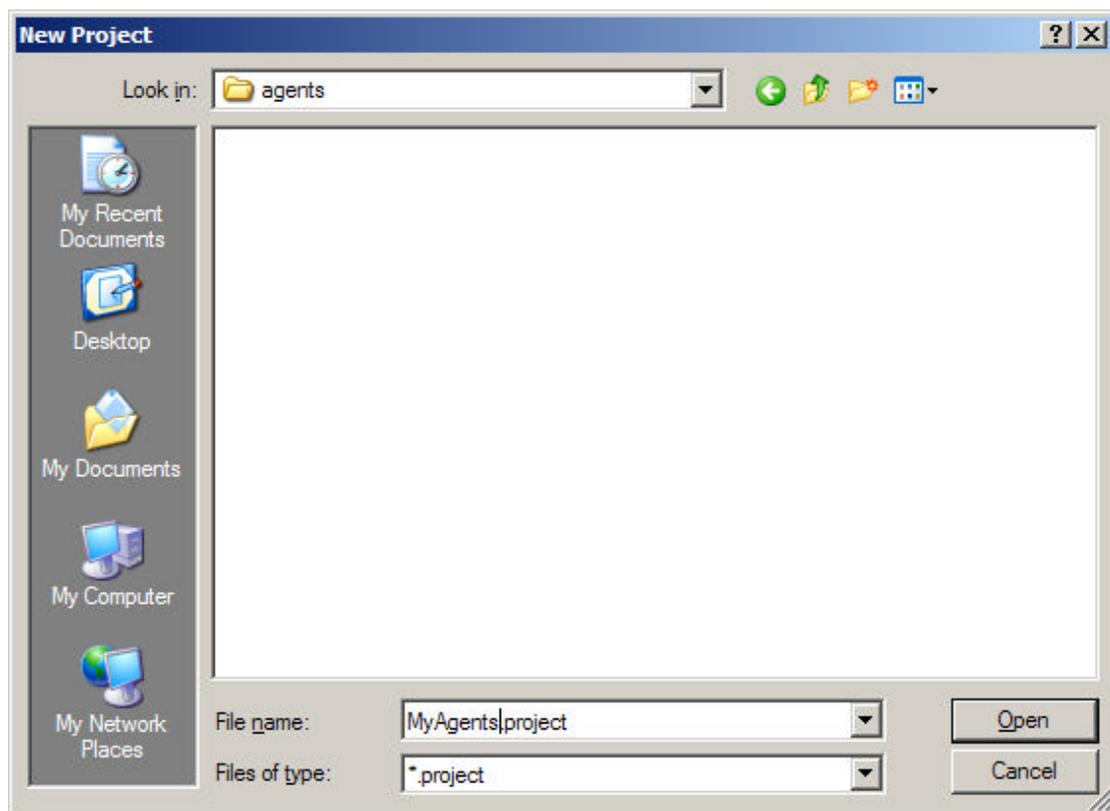
4. **Click "Open", to create the new project**

Creating a XML agent

Next, let's create a simple XML agents that searches a RSS feed.

Mission
Make an agent that enables searching a BBC's RSS News Feed.

Please test the url to see if the feed is "alive"
http://newsrss.bbc.co.uk/rss/newsonline_world_edition/front_page/rss.xml

1. **Go to the Project tab, click the new XML agent icon**
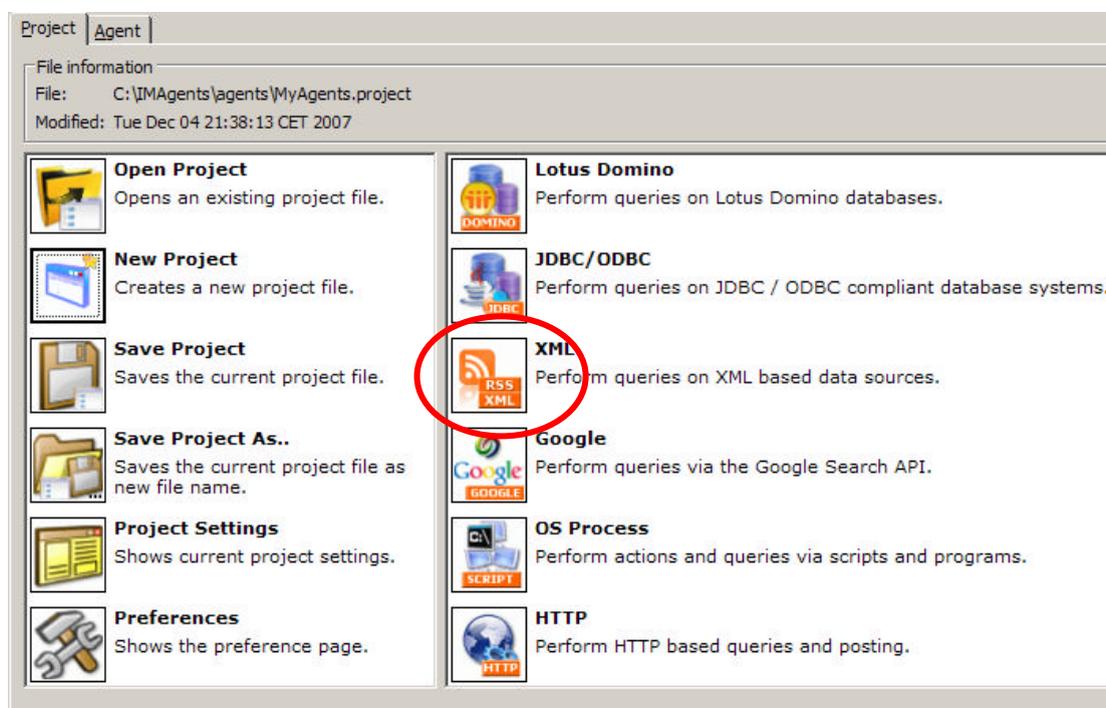
2. **Name the agent, RSSAgent**
3. **Click Next**
4. **Verify that the selected agent template is "XML"**
5. **Click Next**
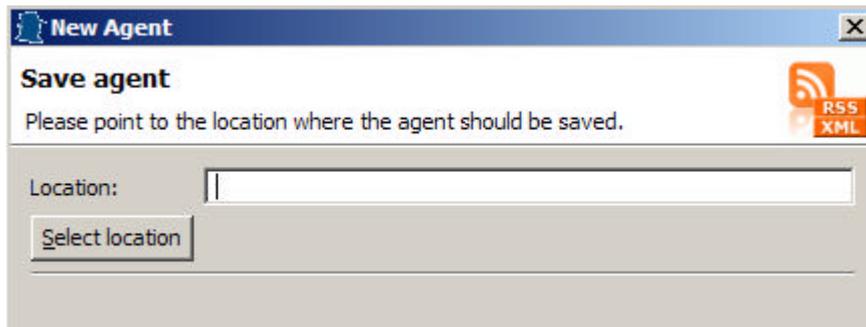
6. Click the "Select location" button
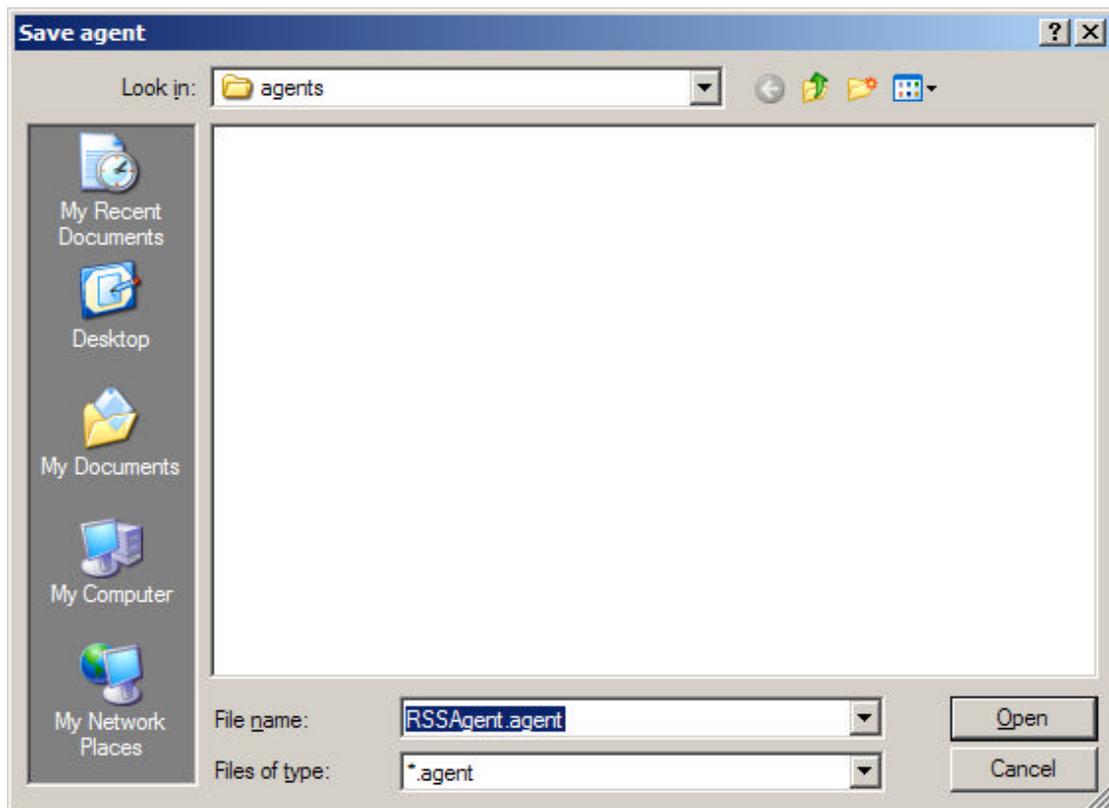
7. Verify the file name and location
8. Click Open
9. Click Finish

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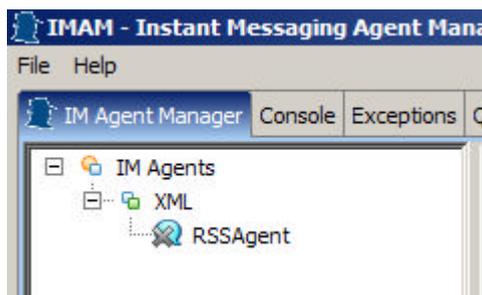
You now have your first agent.

Let's go on to configure it.

10. **Select the new agent, on your left, and the Agent tab appears**
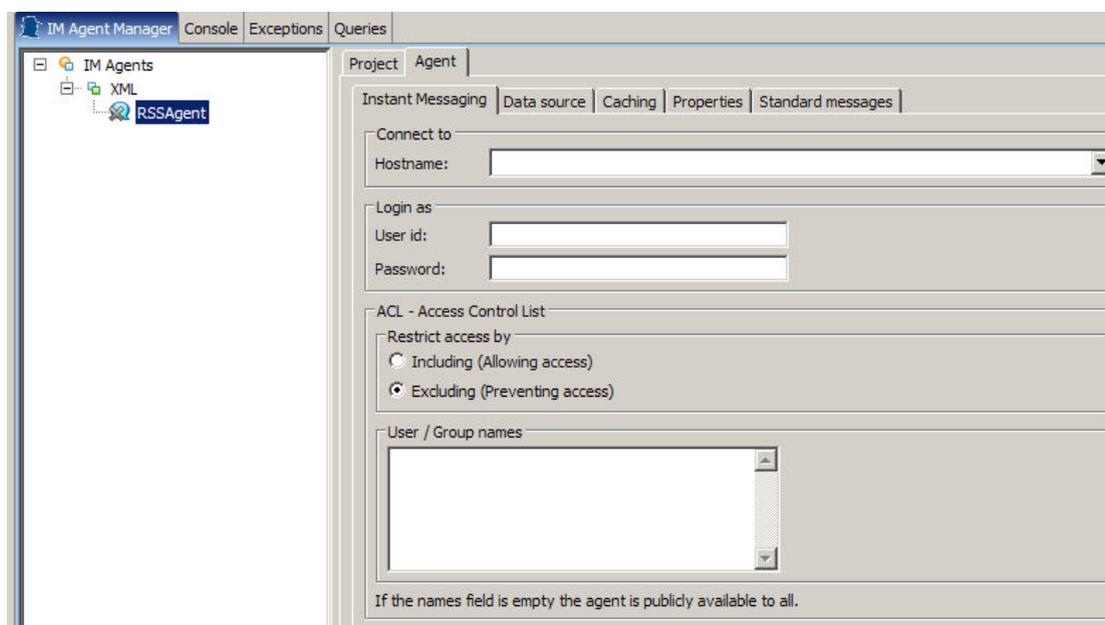
On the Instant Messaging Tab, we need to fill in the Lotus Sametime connectivity information.

You should see the following:

Connect to
The name of the Sametime community host, eg. host.domain.com

Login as
User id and password for the agent account.

This should be a name that the users can relate to, because this is the name that the agent will be represented with in the users contact list.

So, create a Sametime account named "RSSAgent" in the Sametime Directory, and add the user id and password to these fields.

ACL - Access Control List
The ACL is where you can restrict access to the agent.

We will not be using the ACL for now. So leave it as it is. The ACL is not active, when there are no user/group names in the names text field.

11. **Save the agent**
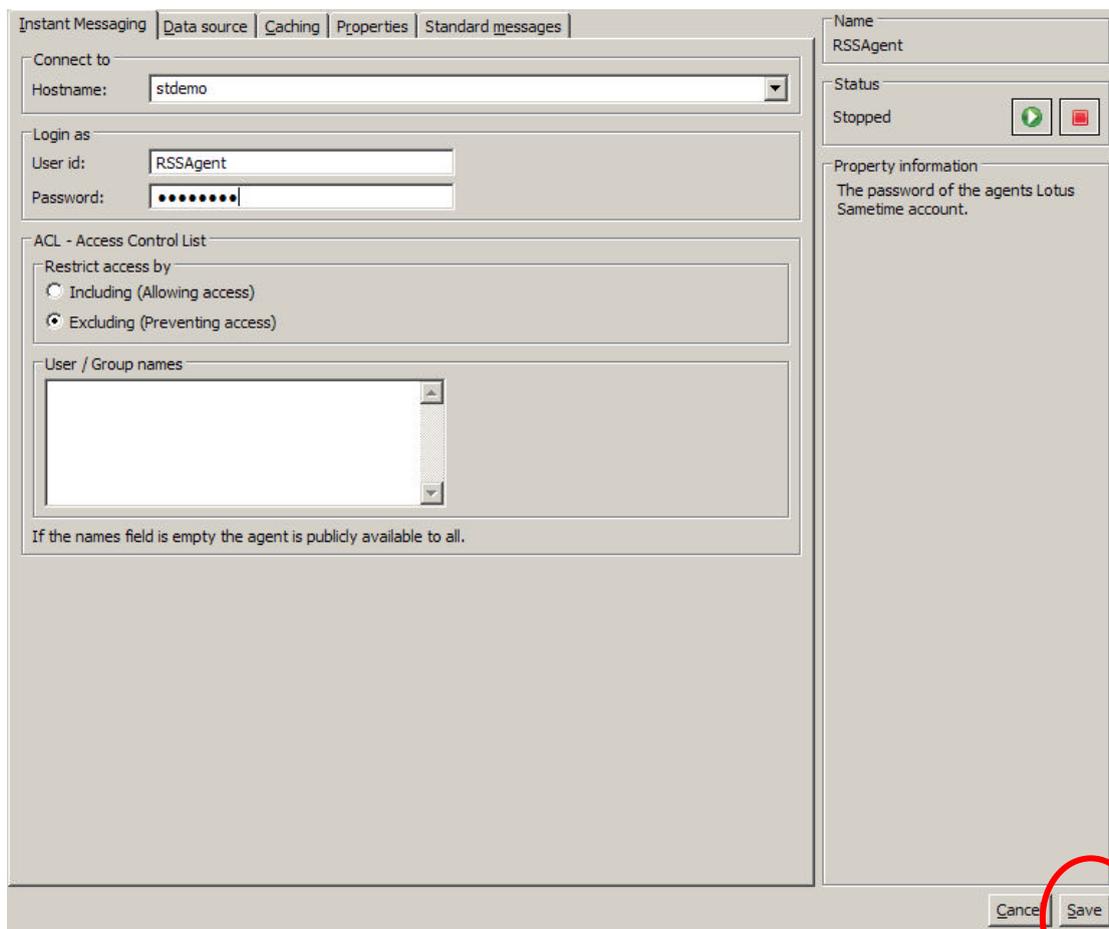
12. **Save the project**

Now we're done with the Instant Messaging Tab.

13. Click the Data source Tab

Insert this url in the Url field:
http://newsrss.bbc.co.uk/rss/newsonline_world_edition/front_page/rss.xml

We will not use the **Login as** section for this url, it is public available.
As you can see the **Query** field is pre-set with the {@USERQUERY} keyword,
which get automatically replaced with the users chat message.

Leave it as it is.

*FYI: You can press Ctrl-Space to activate the keyword selector dialog, in the query
field.*

14. **Save the project**

Before we start the agent, let's get to know the Console and Exception views.
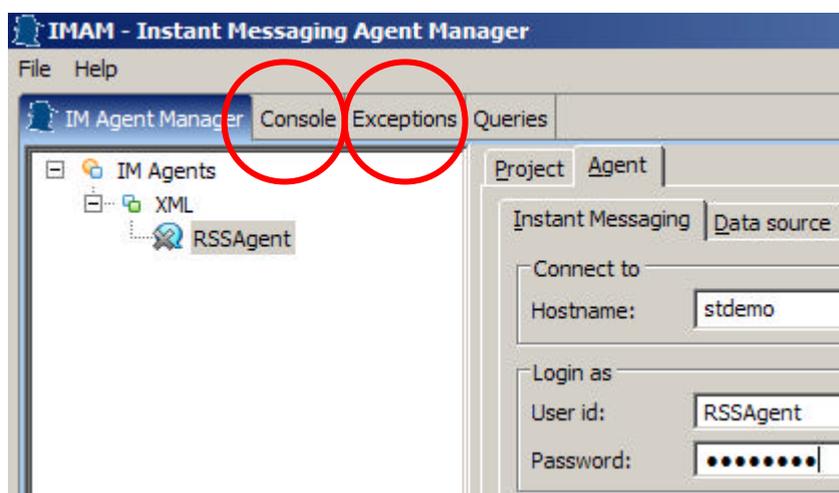
The Console view shows all system messages. And the Exception view shows any
errors / exceptions thrown by the system and agents.

So if it does not seem to work, check out these views.

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15. Start the agent

Push the start icon
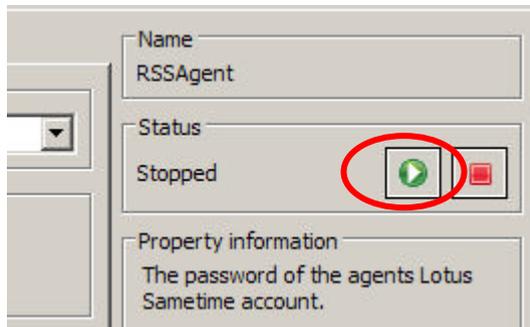
or right-click the agent, to the left.
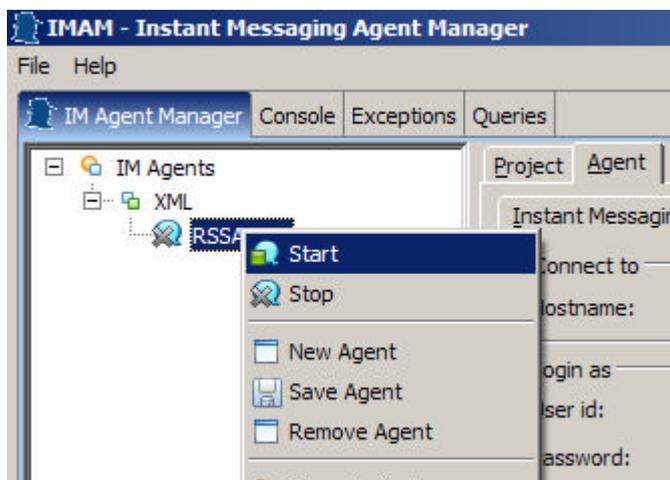
If all goes well the agent should look like this, with the green square bubble icon
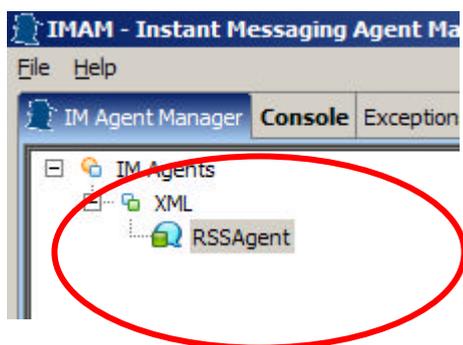
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Check the Console view, it should look like this
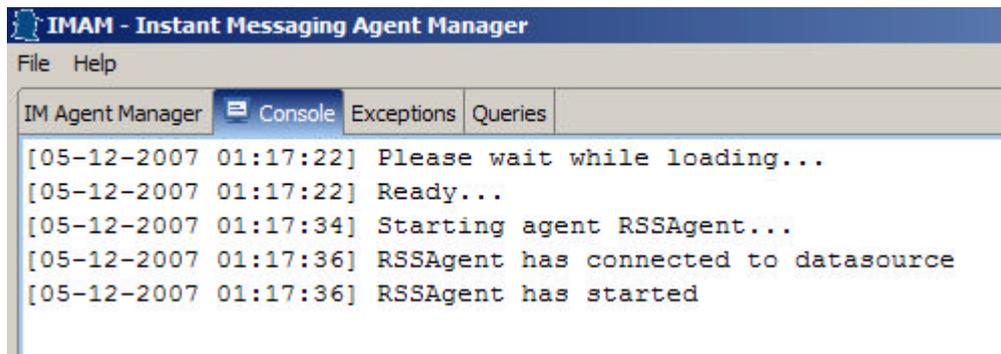
If it does not look something like this, something could be wrong. Check the Exception view if you feel like it.

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Chatting with the agent.

Start your Lotus Sametime Connect agent.

NOTE:
Be sure to:
- connect yourself to the right Lotus Sametime community
- add the agent RSSAgent to your contact list.
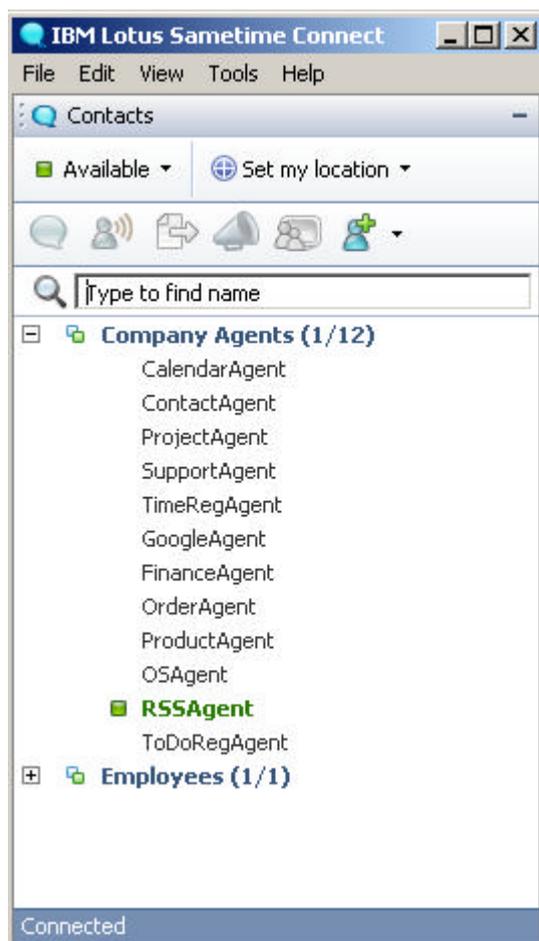
The agent should be active ready to serve you.

> **1. Start a chat with the agent (double-click the agent name)**

Before you send a search string, be sure that you check out the BBC RSS feed for any
text you want to search for:

Click this link to see the feed, and find a word to test with
http://newsrss.bbc.co.uk/rss/newsonline_world_edition/front_page/rss.xml

2. **Send the chat search string**

After sending your query string, you should see a result like this if there were any hits on your search string.
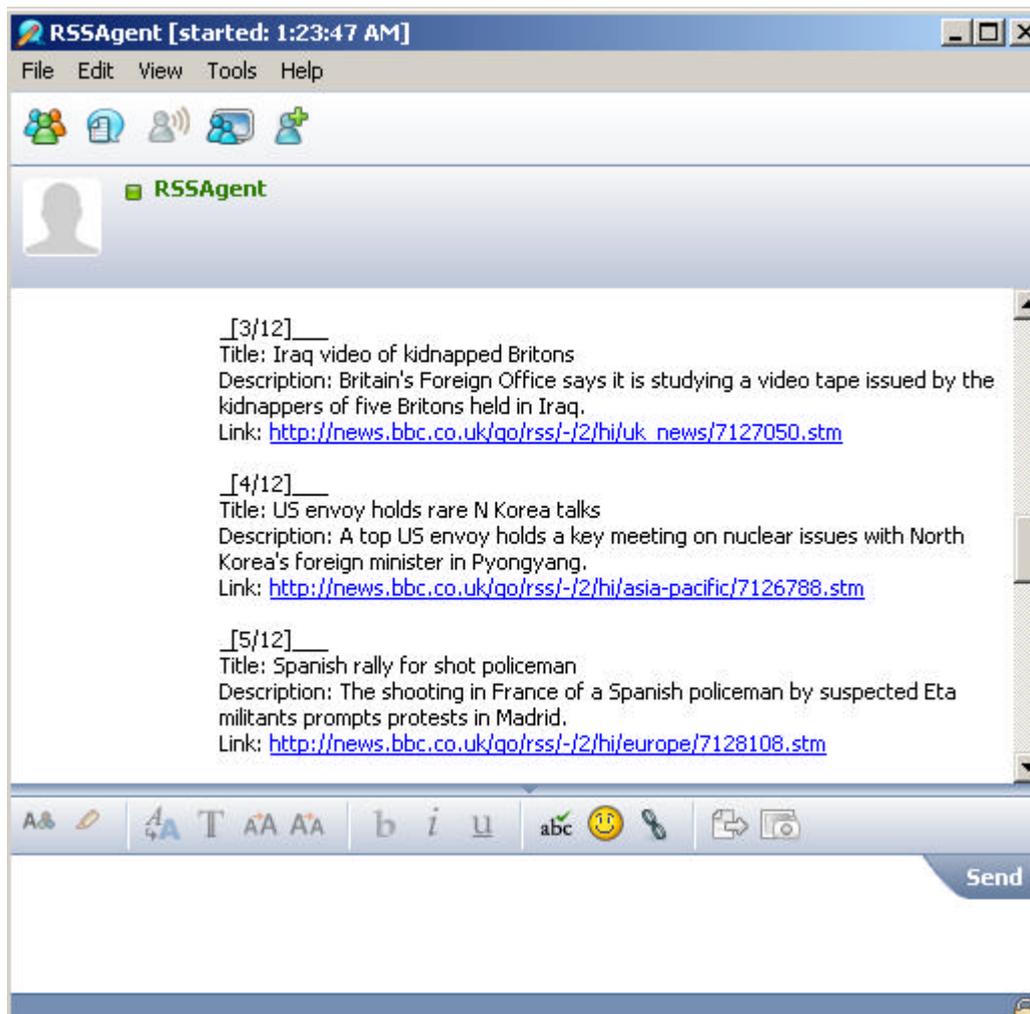
Notice that you can click the links and go directly to the news pages on the BBC website.

This was a simple example on the use of a XML agent. The agent could might as well have integrated to like a product catalog or any other kind of XML source.

Creating a Google agent

You can create agents that searches specific sites and returns the result to the client

Mission
Make an agent that exclusively searches the IBM website (ibm.com), via Google
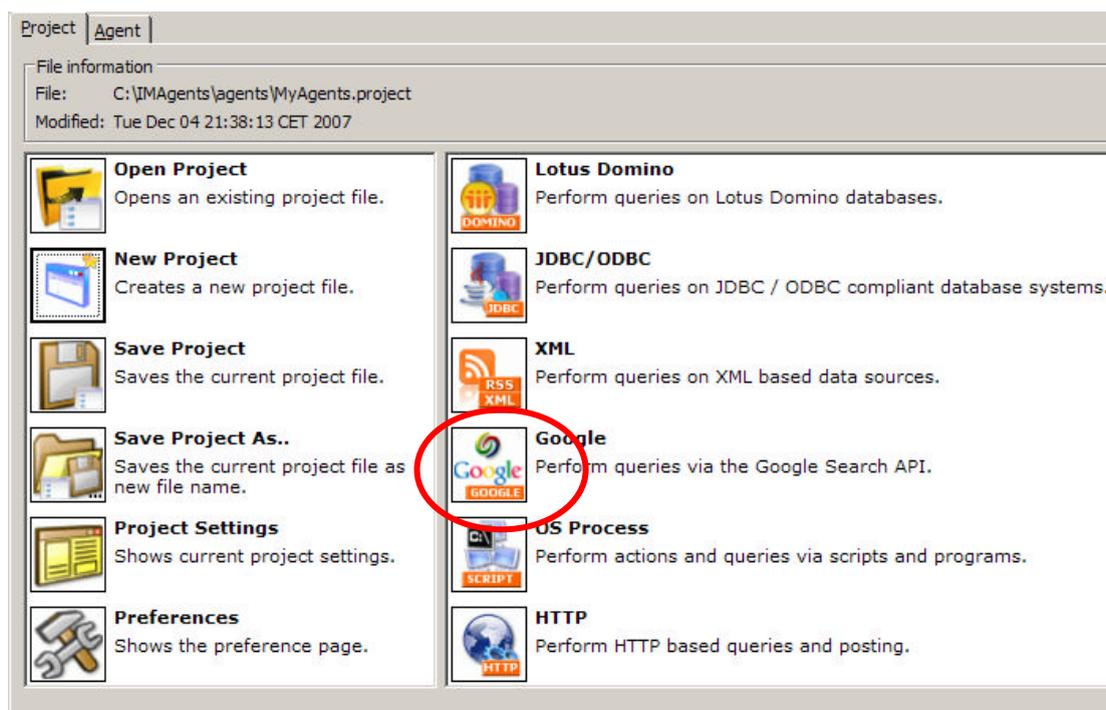
1. **Repeat the steps for creating, but this time select Google and name it GoogleAgent. Start by clicking the Google icon on the Project Tab**

2. **Fill out the Instant Messaging Tab, as before, but with a new agent id and password (id could be GoogleAgent for now. Remember to create a Sametime account for the agent)**

3. **Save the agent or project**
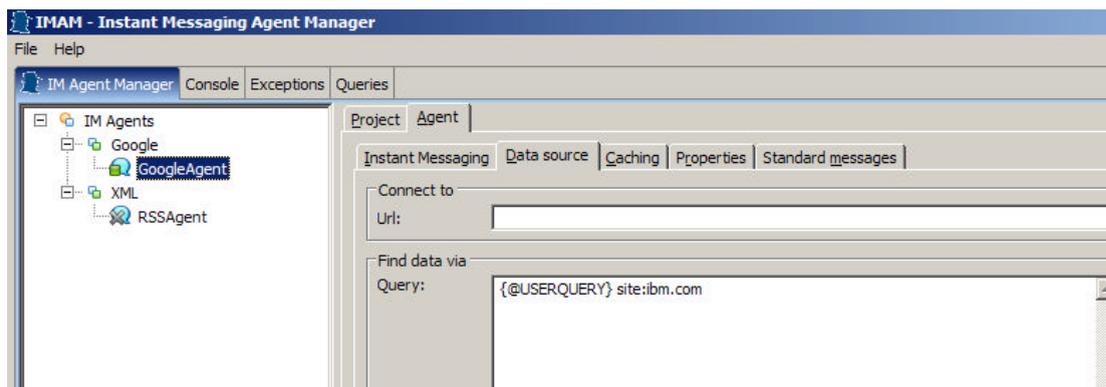
1. **Select the Data source Tab, for the GoogleAgent**

The Url field should be left blank, it is used to companies having an internal Google search engine webservice.

Notice that the Query field is set to {@USERQUERY} **site:ibm.com**.
The "site:" is one of many usable Google search arguments.

"site:" restricts the search to a single website and not all sites on the net.

2. **Test the agent in the Lotus Sametime Connect client, with the search word "lotus"**

NOTE:
A Google agent is dependant on a Google key. New Google agents get a default key on creation. This is a key that we made, but you should get your own as soon as possible.
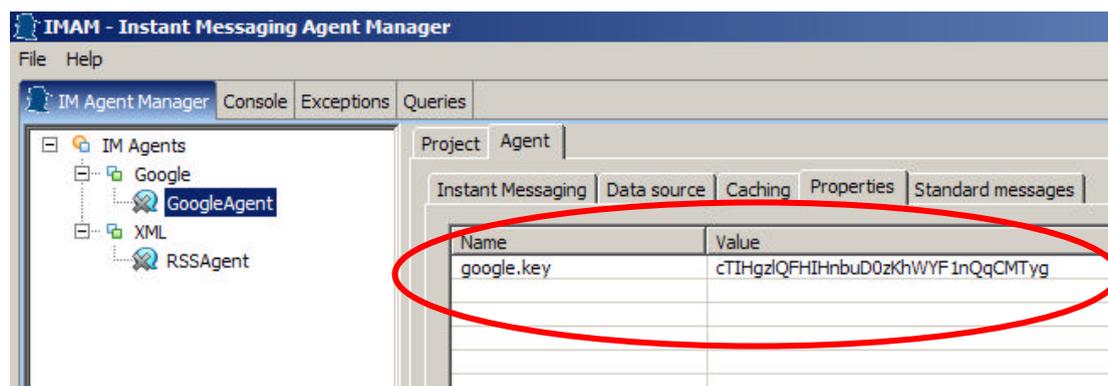
You should be able to get your own Google key here:

http://code.google.com/apis/ajaxsearch/signup.html

Creating an JDBC/ODBC agent

You can create agents that searches searches JDBC and ODBC sources, such as DB2, Oracle, Microsoft SQL, MySQL and other relational database systems.

Mission

Make an agent that searches a product catalog via an Excel ODBC source

In this excercise we will make it simple and use ODBC to search a very simple Excel spreadsheet, that serves as a product/price catalog.
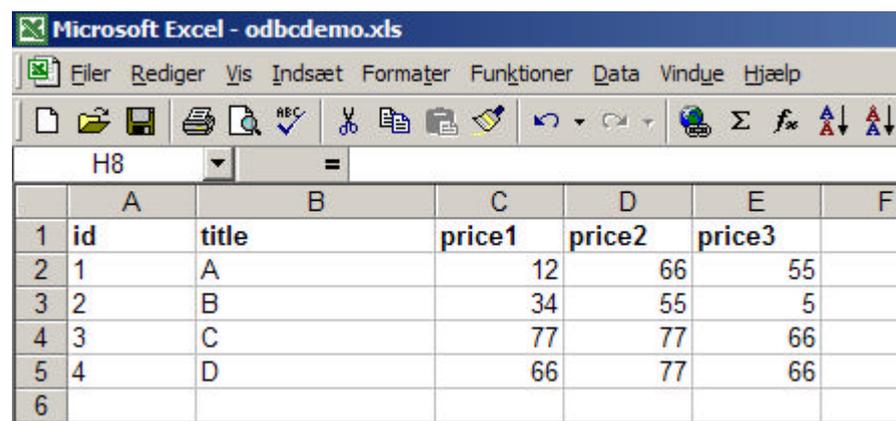
Let's start by creating an ODBC source for the Demo Excel file i the samples folder:

File name: <IMAM install>/doc/samples/odbcdemo.xsl

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1. **Start -> Settings -> Control Panel -> Administrative Tools -> Data Sources (ODBC)**

Select the **System DNS** Tab

Create a new Excel ODBC source.

2. **Click Add, and Select the Microsoft Excel Driver**
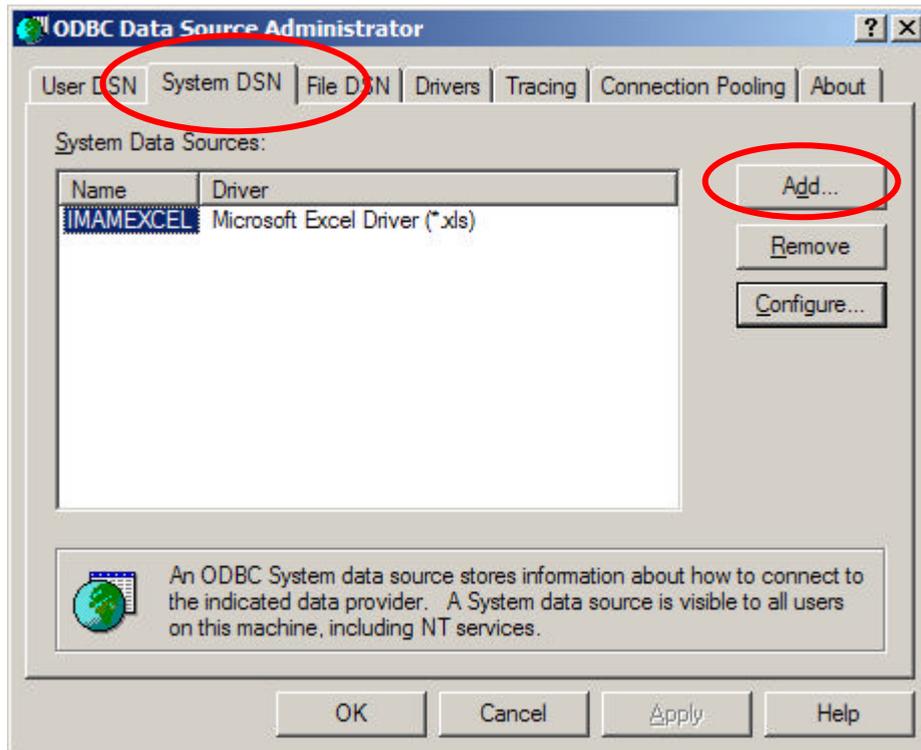
3. **Name the ODBC source "IMAMEXCEL"**
4. **Select the demo Excel file**
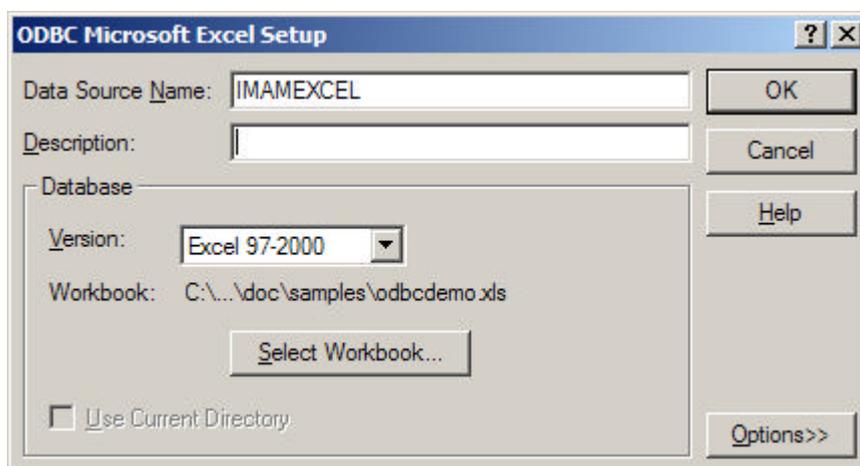
File name: <IMAM INSTALL>/doc/samples/odbcdemo.xsl

5. **Create an ODBC agent called ProductAgent**
6. **Save the agent**
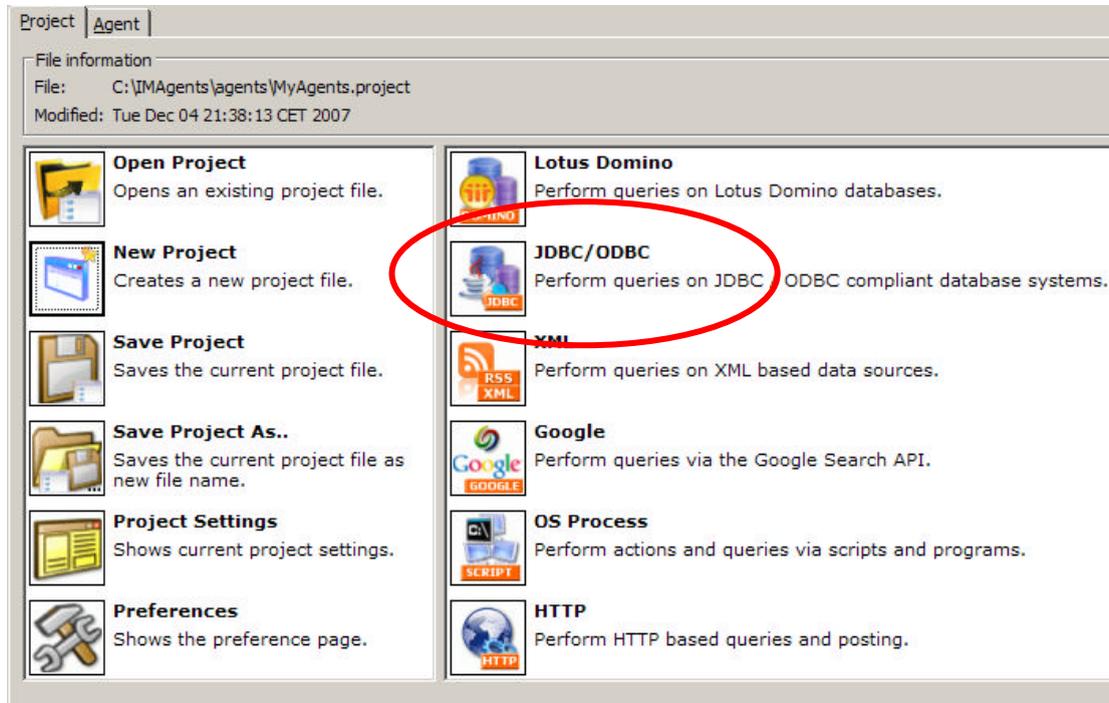
7. **Select the Data source Tab**
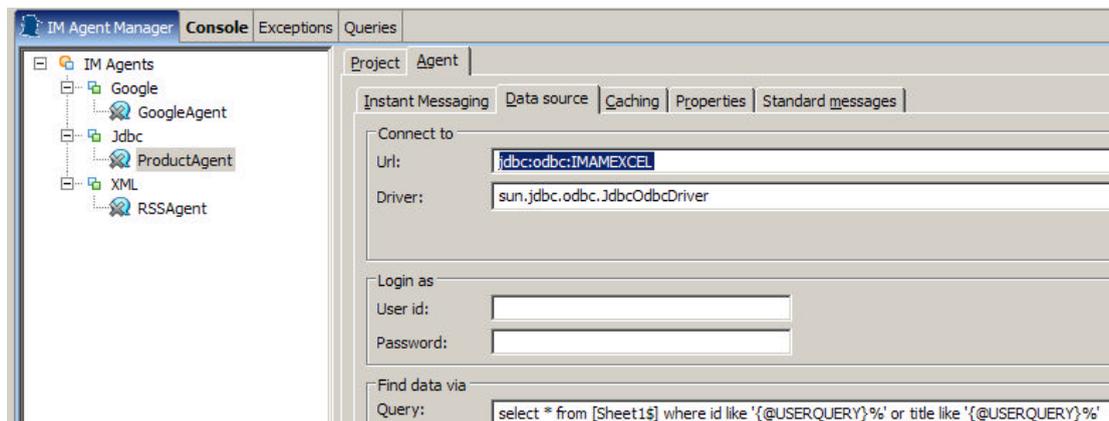
8. **Set the Data source Tab, and fill in the values below**

ODBC Url: jdbc:odbc:IMAMEXCEL

ODBC Driver: sun.jdbc.odbc.JdbcOdbcDriver

Query:
select * from [Sheet1$] where id like '{@USERQUERY}%' or title like '{@USERQUERY}%'

Data items: id,title,price1,price2,price3

Data labels: Product id,product name,Price 1,Price 2,Price 3

9. **Save the agent and test it.**

Additional sample agents

If you feel like trying to some more advanced agent use technologies like JDBC on relationel databases, Lotus Domino, HTTP posts, OS Process or others, we have included a sample project that has several different agent definition that you can use as a start to integrate to you own data sources.

If this is too complex for you, you can always contact us and we can help you to take it to the next step.

The sample agent project is located in the <IMAM INSTALL>/doc/samples/project

Here there is an agent project called agents.project. Open this project in IMAM.

NOTE:
Please be aware that the agents, in the sample project, are AS-IS, and that you have to make some work and corrections to the agents, to make them work in your environment.

The sample project is only included to give an insight to how such agents could be configured. The project is not supposed to run without errors.

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Additional information

Thank you for reading this tutorial.

You can get more information at:

http://www.imam.dk/

or go directly to the Contact Us form to submit any questions or comments.

http://www.imam.dk/imam/imam.nsf/dmail?openform&exp=contact

You can also visit us at our Semaphor company site (it's currently only in danish):

http://www.semaphor.dk/