



MetaCore Integration with Cytoscape



THOMSON REUTERS

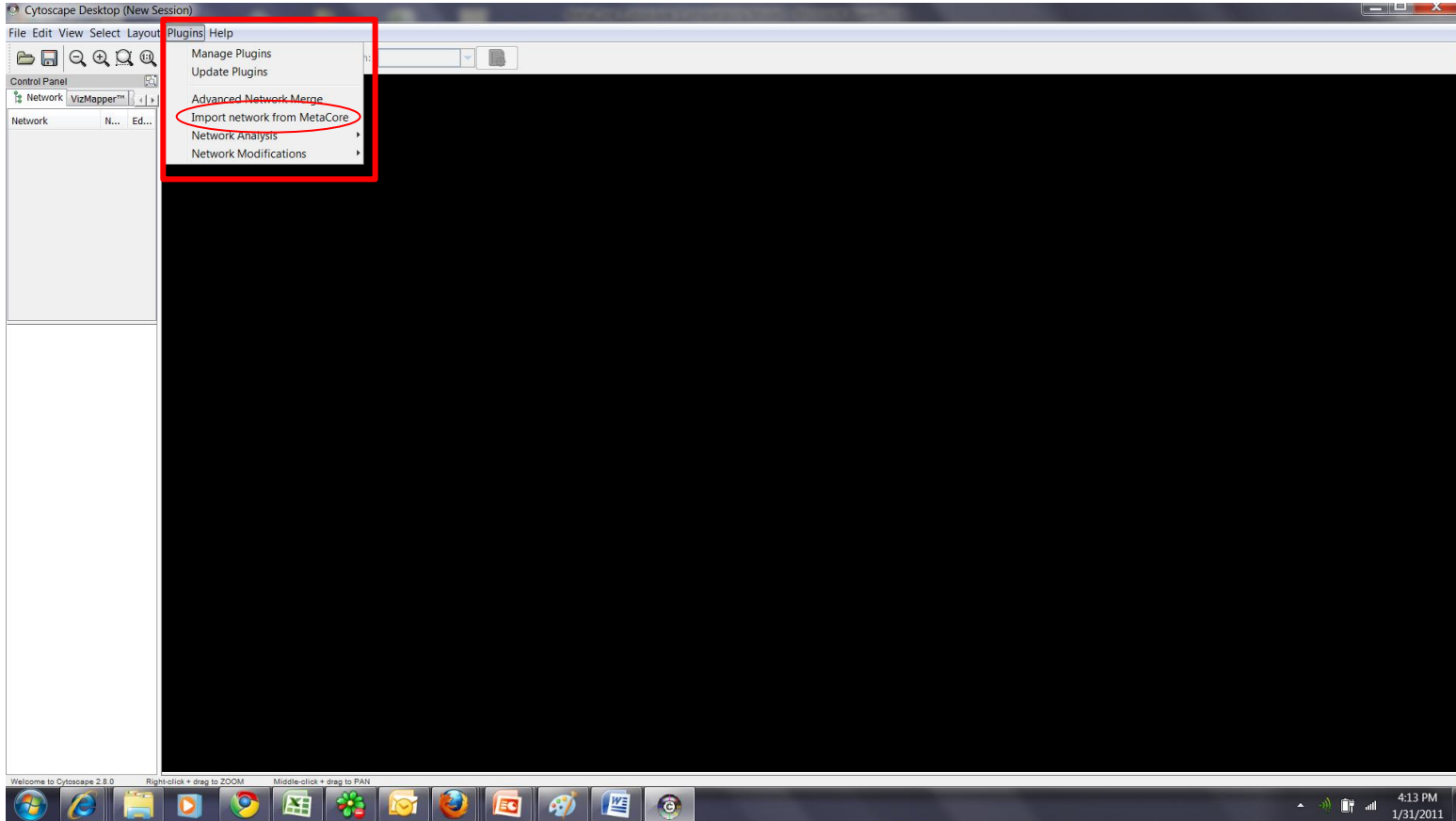
Installation Instructions

- Download <http://ftp.genego.com/dist/CytoscapeNetPlugin.jar>
- Place the CytoscapeNetPlugin.jar file in the 'plugins' folder within the Cytoscape installation directory.
For example, C:\Program Files\Cytoscape_v2.8.0\plugins.
- Open Cytoscape
- The integration function is then accessible from the 'Plugins' menu in Cytoscape (see below).
- NOTE: When sending content to Cytoscape, the plugin will occupy a MetaCore license seat. The user will need to log out of MetaCore to release the seat for another user to use.



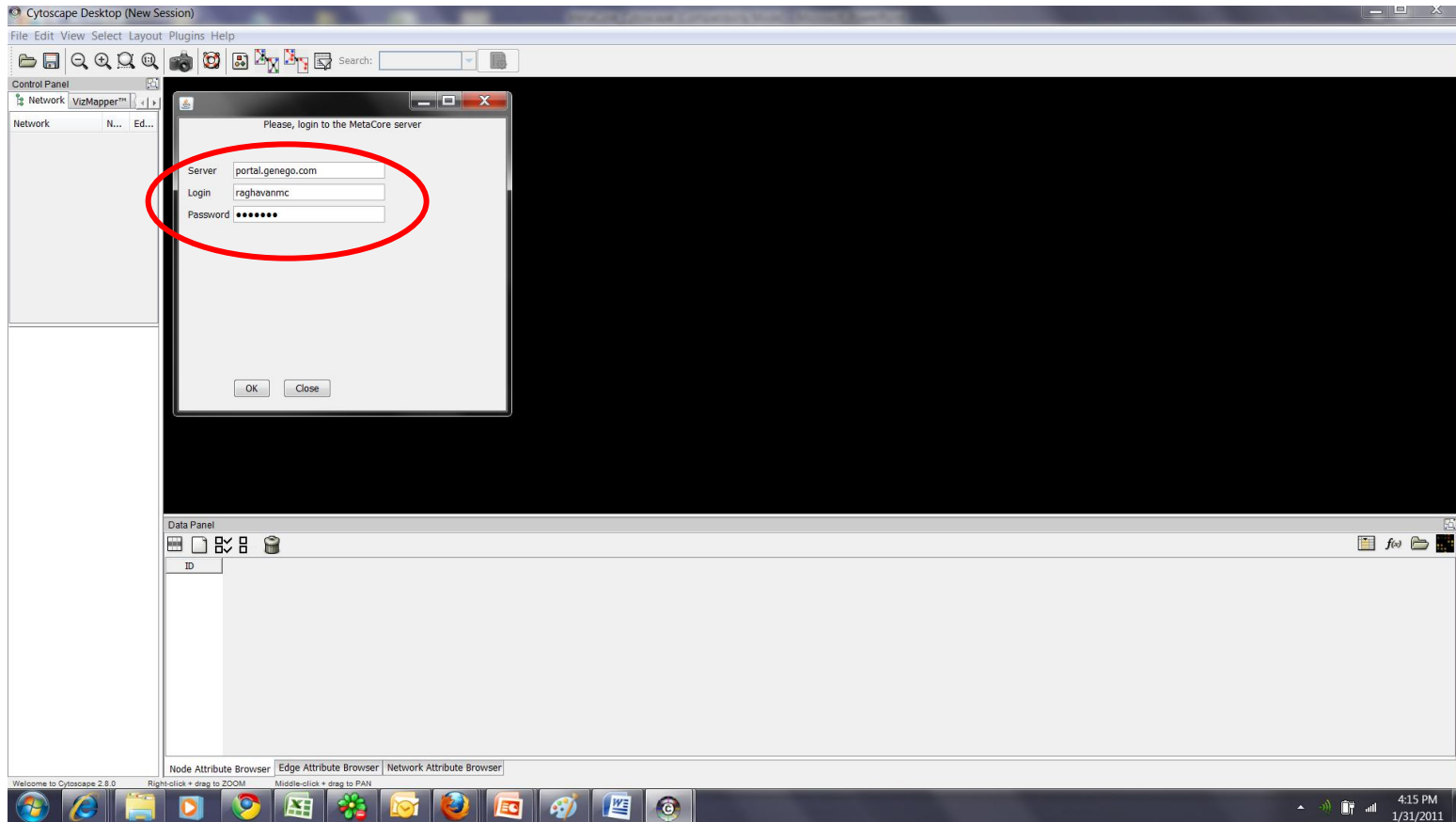
Open the plugins

Select “Import network from MetaCore” from the Plugins menu



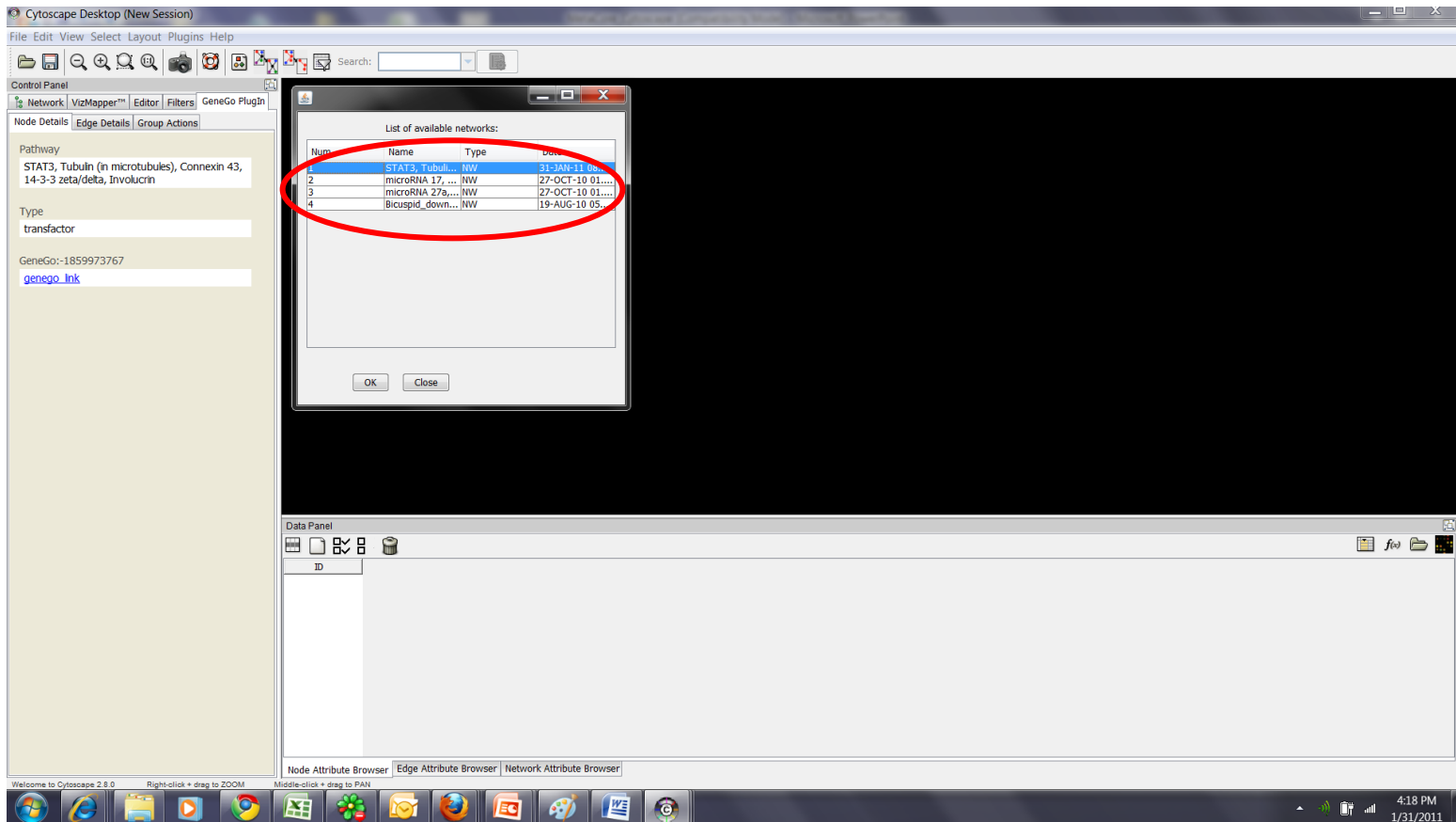
Log in to MetaCore Server

You need to specify MetaCore server name, your login and password here



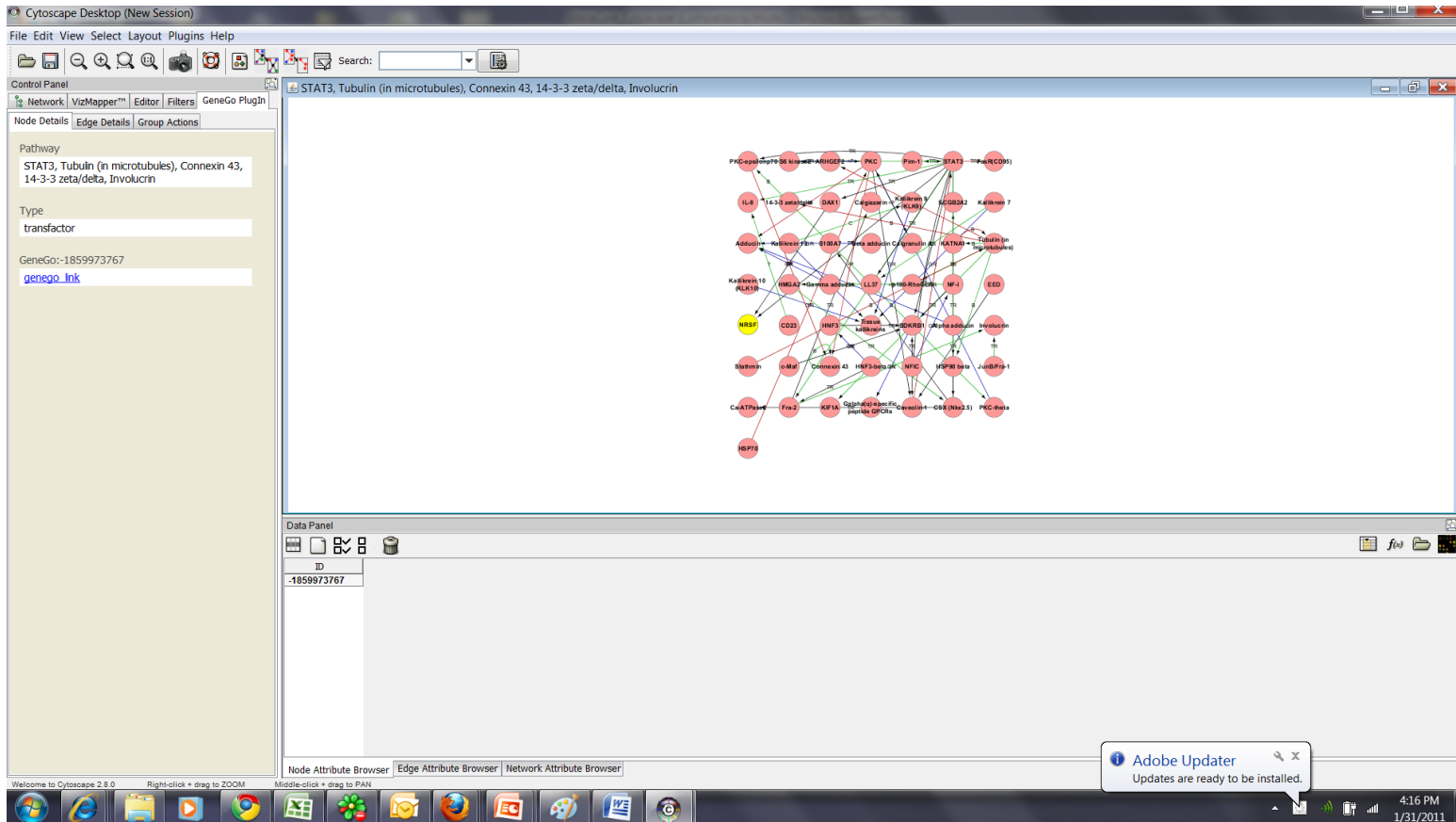
Choose network

Select network from your stored networks list



View Network

Selected network will appear in Cytoscape



Object detail

Select an object(node) in the network and then click 'genego link' to open the MetaCore details page for the selected node

The screenshot shows the Cytoscape Desktop interface with a network diagram on the right and a browser window on the left. The browser window displays the NRSF gene details page from portal.genego.com. A red arrow points from the 'genego link' button in the Cytoscape interface to the browser window.

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Human **Mouse**

General

Gene Details

REST	
Symbols	REST, NRSF, XBP1
Full Name	RE1-silencing transcription factor 1
Synonyms	repressor binding 1; X2 box repressor; neuron restrictive silencing factor 1
Description	This gene encodes genes in non-neuronal tissues. The protein functions as a transcription factor and is involved in the regulation of gene expression.

Edge detail

Select a link(edge)in the network and then click 'genego link' to open the MetaCore details page for the selected link

The screenshot displays the Cytoscape Desktop interface. On the left, the 'Node Details' panel shows the selected node: 'STAT3, Tubulin (in microtubules), Connexin 43, 14-3-3 zeta/delta, Involverin'. Below this, a 'genego link' is highlighted with a red circle and an arrow pointing to the 'Link Info' window. The 'Link Info' window is titled 'Link Info: PKC -> Ad...' and shows a table with the following data:

Link	Effect	Mechanism	Species
PKC -> Adducin	Inhibition	Phosphorylation	Homo sapiens, Mus musculus, Rattus norvegicus

Below the table, the 'References' section lists three entries:

- Larsson C. Protein kinase C and the regulation of the actin cytoskeleton. Cellular signaling 2006 May;18(3):275-84 PMID: 16109477 Species: Homo sapiens
- Lounsbury KM, Stern M, Taatjes D, Jaken S, Mosman ET. Increased localization and substrate activation of protein kinase C delta in lung epithelial cells following exposure to asbestos. The American journal of pathology 2002 Jun;160(6):1991-2000 PMID: 12487904 Species: Homo sapiens
- Fowler L, Everitt J, Stevens JL, Jaken S. Redistribution and enhanced protein kinase C-mediated phosphorylation of alpha- and gamma-adducin during renal tumor progression. Cell growth & differentiation: the molecular tumor journal of the American Association for Cancer Research 1998 May;9(5):405-13 PMID: 9607561 Species: Homo sapiens

The main network diagram on the right shows a complex web of interactions between various proteins, with PKC and Adducin highlighted in red. The bottom of the interface shows the 'Data Panel' and 'Node Attribute Browser'.