

Sametime  
Version 9.0.0

*Sametime 9.0.0*  
*Software Development Kit*  
*Monitoring and Statistics Toolkit Guide*



## **Edition Notice**

**Note:** Before using this information and the product it supports, read the information in "Notices."

This edition applies to version 9.0.0 of IBM Lotus Sametime (program number 5725-M36) and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Contents

<b>Introduction.....</b>	<b>4</b>
<b>Calling the service.....</b>	<b>4</b>
Apache Commons HttpClient.....	4
Sun JDK.....	4
<b>Access control.....</b>	<b>5</b>
<b>Data format.....</b>	<b>6</b>
<b>Data description.....</b>	<b>6</b>
Community Server.....	7
Buddy List.....	8
Places.....	8
File Transfer.....	9
Resolve.....	10
General.....	10

## Introduction

The IBM® Lotus® Sametime Monitoring and Statistics Toolkit is a mechanism for developers to obtain statistical information about a Sametime server running on IBM® Lotus® Domino. The toolkit is a service implemented as a servlet on the Sametime server. The service returns the data in XML format.

## Calling the service

To call the service, use the following URL:

---

```
http://<server name>/servlet/statistics
```

---

Note that the first call to the servlet initializes the service and an empty XML document is returned. Subsequent calls will return XML describing the current state of the Sametime server.

When programmatically accessing the service from Java remember to set the authorization header for the HTTP GET. Examples for testing with the Apache Commons HttpClient and the Sun Java Development Kit are given below.

## Apache Commons HttpClient

---

```
Credentials credentials =  
    new UsernamePasswordCredentials(username, password);  
  
client.getState().setCredentials(AuthScope.ANY, credentials);
```

---

## Sun JDK

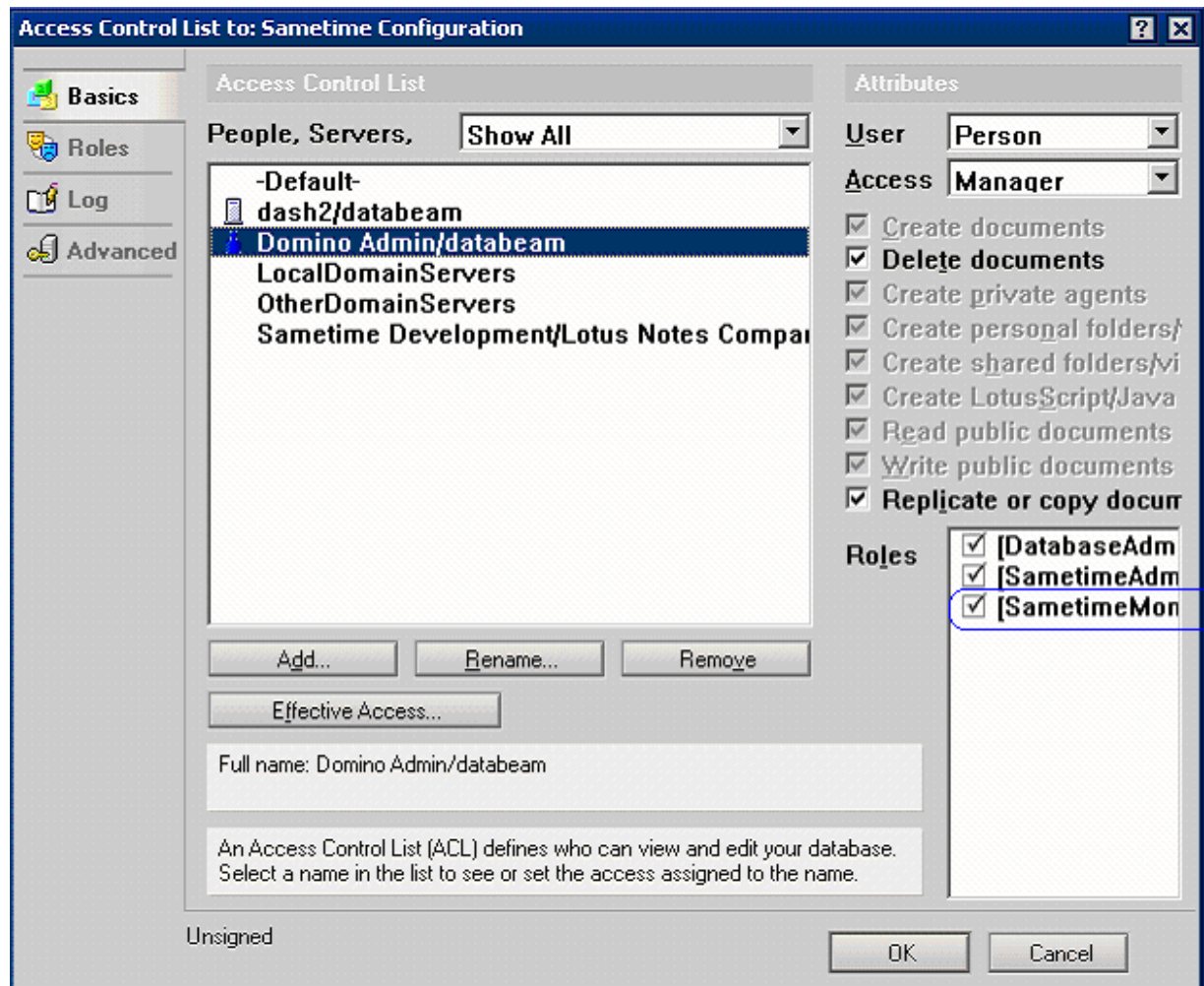
---

```
String auth = new String (username + ":" + password);  
  
String encoding = new sun.misc.BASE64Encoder().encode(auth.getBytes());  
  
connection.setRequestProperty("Authorization", "Basic " + encoding);
```

---

## Access control

The service is protected by the access control list (ACL) in stconfig.nsf. The SametimeMonitor role determines what accounts have permission to receive data from the service.



## Data format

The data returned from the service is formatted as XML. An example snippet is given below.

---

```
<SametimeStatistics>
  <Statistic name="MinConcurrentLoggedInUsers">
    <Value>30</Value>
  </Statistic>
  <Statistic name="FailedLoginOperations">
    <Value>30</Value>
  </Statistic>
  .
  .
  .
  <Statistic name="ConcurrentLoggedInUsers">
    <Value>36</Value>
  </Statistic>
  <Statistic name="PlacesChatMsgs">
    <Value>1121</Value>
  </Statistic>
  <Statistic name="MinConcurrentLogins">
    <Value>36</Value>
  </Statistic>
  .
  .
  .
</SametimeStatistics>
```

---

## Data description

The following tables describe the statistic elements. The set of elements may change based on the features and architecture of the Sametime product.

In the tables, “login” refers to an instance of a user that is logged in to the Sametime server. A user may log in more than once; for example, if more than one application logs in to Sametime.

“Statistic requests” are sent by the service through the channel it creates to the community server. By default, statistics requests are sent every 30 seconds. To change the interval, specify a new value for `servlet.statistics.initArgs` in `<domino data directory>servlets.properties`. For example:

---

```
servlet.statistics.initArgs=Roles=SametimeMonitor,UpdateInterval=60
```

---

## Community Server

Table listing community Server statistics.

ConcurrentLogins	Current number of login instances for the server
ConcurrentLoggedInUsers	Current number of users that logged in to the server

MaxConcurrentLogins	Highest ConcurrentLogins measured from the last statistics request
MaxConcurrentLoggedInUsers	Highest ConcurrentLoggedInUsers measured from the last statistics request
MinConcurrentLogins	Lowest ConcurrentLogins measured from the last statistics request
MinConcurrentLoggedInUsers	Lowest ConcurrentLoggedInUsers measured from the last statistics request
AvgConcurrentLogins	Average of ConcurrentLogins measured from the last statistics request
AvgConcurrentLoggedInUsers	Average of ConcurrentLoggedInUsers measured from the last statistics request
NewImCnls	Number of new chat sessions measured since the last statistics request
ImMsgs	Number of chat messages sent since the last statistics request (includes meta-messages like "Ofira is responding...")
ConcurrentImCnls	Number of open chat sessions
IncompleteLoginOperations	Number of login operations that were not completed (still in progress), measured since the last statistics request
SuccessfullLoginOperations	Number of login operations that were completed successfully, measured since the last statistics request
FailedLoginOperations	Number of login operations that were not completed, measured since the last statistics request
MaxImCnls	Highest IM channels (NewImCnls), measured since the last statistics request
SuccessfulUserUpOperations	Number of users that logged in since the last statistics request
SuccessfulUserDownOperations	Number of users that logged out since the last statistics request
TotalLogins	Total number of logins since the server started
TotalLogouts	Total number of logouts since the server started
TotalUniqueLogins	Total number of unique logins since the server started
TotalTwoWayChats	Total number of two way chats since the server started

## Buddy List

Table listing buddy list statistics.

NumberOfLogins	Number of "on login" actions that arrived via the community channel and were counted since the last statistics request
NumberOfLogouts	Number of "on logout" actions that arrived via the community channel and were counted since the last statistics request
NumberOfStatusChanges	Number of status update that were sent to users since the last statistics request
NumberOfAttributesChanges	Number of updates that were sent to users regarding users' attributes since the last statistics request
NumberOfBuddyListChannelCreations	Number of buddy list channels that were created since the last statistics request
NumberOfSubscribes	Number of 'Subscribe' requests that were submitted since the last statistics request.
NumberOfUnsubscribes	Number of 'Unsubscribe' requests that were submitted since the last statistics request.
TotalNumberOfsubscribes	Total number of 'Subscribe' requests submitted.
NumberOfWatchedUsers	Number of users on which 'Subscribe' requests were submitted, since the last statistics request.
NumberOfUnWatchedUsers	Number of users on which 'Unsubscribe' requests were submitted, since the last statistics request.
TotalNumberOfWatched	Total Number of users on which 'Subscribe' requests were submitted.
TotalNumberOfOnlinePost85WatchedUsers	Total Number of online users who connected to ST8.5 and later Community server and on which 'Subscribe' requests were submitted.
NumberOfOfflineStatusChanges	Number of 'User is offline' status messages sent from server to subscribers, since the last statistics request.
NumberOfFetchRequests	Number of fetch requests sent by the server, to obtain a particular users' state (status, attributes, privacy,...), since the last statistics request.
NumberOfSubscribesFromExternalUsers	Number of 'Subscribe' requests that were submitted by external users, since the last statistics request.
TotalNumberOfSubscribesFromExternalUsers	Total number of 'Subscribe' requests submitted by external users.
NumberOfUnSubscribesFromExternalUsers	Number of 'Unsubscribe' requests that were submitted by



	external users, since the last statistics request.
NumberOfNotificationsToExternalUsers	Number of notifications (status updates, subscription responses, etc..) sent to external users, since the last statistics request.
NumberOfSubscribesOnExternalUsers	Number of 'Subscribe' requests, to watch external users, that were submitted since the last statistics request.
TotalNumberOfSubscribesOnExternalUsers	Total number of 'Subscribe' requests, to watch external users.
NumberOfUnSubscribesOnExternalUsers	Number of 'Unsubscribe' requests, to stop watching external users, that were submitted since the last statistics request.
NumberOfNotificationsFromExternalUsers	Number of notifications (status updates, etc..) sent from external users, since the last statistics request.
NumberOfStatusChangesInPM	Number of Status changes that occur on the current server.
NumberOfPrivacyChangesInPM	Number of privacy list changes that occur on the current server.
NumberOfAttributesChangesInPM	Number of attributes changes that occur on the current server.

## Places

Table listing places statistics.

ConcurrentNWChats	Number of active n-way chats since the last statistics request
PlacesNum	Number of active places since the last statistics request
MeetingsNum	Number of active meetings since the last statistics request
StartedNWChats	Number of started n-way chats since the last statistics request
StartedPlaces	Number of started places since the last statistics request
StartedMeetings	Number of started meetings since the last statistics request
MaxNWChats	Highest number of n-way chats since the last statistics request
MaxPlacesNum	Highest number of places since the last statistics request
MaxMeetingsNum	Highest number of meetings since the last statistics request
PlacesConcurrentMembers	Current number of users inside meetings
PlacesMaxConcurrentMembers	Highest number of users being who have concurrently attended meetings since the StPlaces server application has been started
PlacesChatMsgs	Number of text messages sent inside meetings since the StPlaces server application has been started. This number never goes down.
TotalNWChats	Total number of n-way chats since the server started

**Note** n-way chat is a place with ability to chat only; meeting is a place with additional activities such as audio, video, and so on. PlacesNum summarizes all n-way chats and meetings.

## File Transfer

Table listing file transfer statistics.

NumberOfFileTransfers	Number of requests for file transferring, via the service, measured from the last statistics request.
NumberOfFileTransferSuccesses	Number of successful file transfers, via the service, measured from the last statistics request.
NumberOfFileTransferFailures	Number of unsuccessful file transfers due to errors or violations such as policy error check or virus detection, measured from the last statistics request. User cancellation is not included as a failure. In this case, the only statistic gathered is that a file transfer request has been received.
NumberOfFileTransferFailuresDueToPolicy	Number of failures due to user policy error check. Causes can include excessive file size, disallowed file extensions, and lack of permission to transfer files.
NumberOfFileTransferFailuresDueToVirus	Number of failures due to virus found, measured from the last statistics request
MaxFileTransferSize	Largest file transferred from the time the application started to run until it was terminated
MaxFileTransferSizeInInterval	Largest file transferred measured from the last statistics request
AverageFileTransferSize	Average size of file transferred, from the time the application has started to run until it was terminated
AverageFileTransferSizeInInterval	Average size of file, which was transferred, measured from the last statistics request
MaxFileTransferTime	Maximum time it took to complete a file transfer, measured from the last statistics request
AverageFileTransferTime	Average time it took to complete a file transfer, measured from the last statistics request, calculated from the time the request was received by the server to the time the last chunk was sent to the receiving side.

## Resolve

The `Resolve_statistics_per_client_types` element gives specific resolve statistics for each client application type (Connect, Notes, etc.).

Example:

---

```
<Statistic name="Resolve_statistics_per_client_types">
  <Value>
    <ResolveStatistics>
      <Type id="4868">
        <Version id="7510" Resolve_Requests="4" Persons_Resolves="2"
          Groups_Resolves="2" Unique_Resolves="0" Exhaustive_Resolves="2" />
      </Type>
    </ResolveStatistics>
  </Value>
</Statistic>
```

---

Attributes:

Table listing resolve statistics attributes.

Resolve_Requests	Number of Resolve requests since the last statistics request
Persons_Resolves	Number of Resolve requests of type Person since the last statistics request
Groups_Resolves	Number of Resolve requests of type Group since the last statistics request
Unique_Resolves	Number of Resolve requests of type Unique since the last statistics request
Exhaustive_Resolves	Number of Resolve requests of type Exhaustive since the last statistics request

## General

EnumeratedProcesses	The names of all the running processes
Platform	The operating system name (OsName), architecture (OsArch), and version (OsVersion)

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