

Asset Management of Chip PC Thin Clients via Microsoft[®] SMS 2003

Technical Brief

Document Version 1.0



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Chapter 1 Preface

This chapter provides general information about the document.

Intended Audience

This document is targeted at system administrators required to manage Xcalibur Global software and Chip PC thin client devices.

Scope

This document is applicable to the following product versions:

- Xcalibur Global 1.2
- ChipPC client device firmware 6.5.4
- Microsoft Systems Management Server 2003

Objectives

The objective of this document is to provide the technical knowledge and understanding that is required to correctly and to effectively use Microsoft's Systems Management Server for asset management of Chip PC thin clients.

Prerequisites

This document assumes that the reader has at least a mid-level technical understanding in the following areas:

- Administration of Xcalibur Global.
- Administration of Microsoft Systems Management Server.

Reference Materials

Xcalibur Global - Administrator's Guide, Ref: DG018U



Document Features

1 Conventions

Bold formatting is used to indicate a product name, required selection or screen text entries.

CAUTION! Text marked Caution contains warnings about possible loss of data.

IMPORTANT Text marked **Important** contains information that is essential to completing a task.

NOTE Text marked **Note** contains supplemental information.

2 Definitions

SMS Server – Microsoft Systems Management Server 2003.

Chapter Overview

This document is divided into the following chapters:

- Chapter 1, "Preface", provides general information about the document.
- Chapter 2, "Introduction", describes the general concepts behind asset management of Chip PC thin clients via an SMS server.
- Chapter 3, "Exporting Thin Client Data from Xcalibur Global", explains the procedure of exporting thin client data from Xcalibur Global to the SMS server.
- Chapter 4, "Managing Thin Clients in the SMS Server", explains how to use Queries and the Resource Explorer to view asset management data for Chip PC thin clients within the SMS server.



Chapter 2 Introduction

This chapter describes the general concepts behind asset management of Chip PC thin clients via an SMS server.

1 Exporting Chip PC Thin Client Data from Xcalibur Global

Xcalibur Global manages Chip PC thin clients and gathers information about these clients that is stored in the Xcalibur Global database. Among this information is data that can be used for asset management, this data can be exported from the Xcalibur Global database to an SMS server.

2 Managing the Chip PC Thin Client Data in the SMS Server

The data exported from Xcalibur Global can be managed in the SMS server using asset management tools such as Queries and the Resource Browser.

3 Licenses

A Chip PC thin client is required to have a special license to enable the export of its asset management data. Clients lacking this license will appear in the SMS server database but with minimal identification information. Unlicensed clients will also have the string "_UNLICENSED" appended to their NetBIOS name in the SMS server.



Chapter 3 Exporting Thin Client Data from Xcalibur Global

This chapter explains the procedure of exporting thin client data from Xcalibur Global to the SMS server.

Procedure

- 1 Run the SMS Asset Management Wizard
 - 1. On the Task Bar, point to **Start > Programs > Xcalibur Global 1.1 > Management Console**. Click on **Management Console** to launch the Xcalibur Global Management Console.
 - 2. Expand the path:

Xcalibur Farm Manager \ Administrative Suite

3. Select and right-click **Database**, to display menu:



Figure 1: Xcalibur Console Window –Path Expanded

4. On the menu, click SMS Asset Management... to open the SMS Asset Management Wizard.



2 Complete the SMS Asset Management Wizard

1. Click Next in the SMS Asset Management Wizard Welcome dialog box.



Figure 2: SMS Asset Management Wizard Dialog Box - Welcome

- 2. In the next dialog box, perform the following:
 - 2.1. In the SMS address text box, type the IP address of the SMS Server.
 - 2.2. In the SMS Site Code text box, type the SMS Server's Site Code.
 - 2.3. Click **Next** to continue.



Figure 3: SMS Asset Management Wizard Dialog Box – Server Parameters

Chapter 3 - Exporting Thin Client Data from Xcalibur Global



NOTE The process of exporting thin client asset management data begins and the following screen is displayed.

SMS Asset Management W	/izard	×
	Process started Checking SMS site SMS site check succeeded Started fetching data from the database Client 03_145 does not have SMS License Client 03_140 does not have SMS License Client 03_136 does not have SMS License Client 03_134 does not have SMS License Client 03_102 does not have SMS License Client 03_102 does not have SMS License	[
	< <u>B</u> ack <u>N</u> ext >	

Figure 4: SMS Asset Management Wizard Dialog Box - Exporting

3. Upon successful export, the following dialog box opens, click **Finish** to complete the export procedure.

SMS Asset Management Wizard		×
	SMS Asset Management Wizard finished successfully	
	< Back Finish	

Figure 5: SMS Asset Management Wizard Dialog Box – Finished Successfully



4. If the export process fails, the following dialog box is displayed. Click **Finish** to complete the execution of the wizard and close the dialog box

SMS Asset Management Wizard	X
<image/>	
< <u>B</u> ack Finish	

Figure 6: SMS Asset Management Wizard Dialog Box – Failure

NOTE If the export process failed, check the SMS server availability and verify the values entered in the **SMS address** and the **SMS Site Code** text boxes.



Chapter 4 Managing Thin Clients in the SMS Server

This chapter explains how to use **Queries** and the **Resource Explorer** to view asset management data for Chip PC thin clients within the SMS server.

Queries

The following section explains how to use **Queries** to locate Chip PC Thin Clients within the SMS database.

1 Creating a Query

- 1. Open the **SMS Administrator Console** and expand the relevant Site Database (the one specified when running the SMS Asset Management Wizard in Xcalibur Global).
- 2. Right click **Queries** to open a menu.
- 3. On the menu select **New > Query**.



Figure 7: SMS Administrator Console Window



- 4. In the **Query Properties** dialog box, perform the following:
 - 4.1. In the **Name** text box type the name of the query (in this example: **Chip PC Thin Clients**).
 - 4.2. Leave **Object Type** at default value of **System Resource** and click **Edit Query Statement...**

Query Properties		? ×			
General Security					
Name:	Chip PC Thin Clients				
<u>C</u> omment:	This query will retrieve Chip PC thin clients	*			
	Import Query Statement				
<u>O</u> bject Type:	Object Type: System Resource				
	Edit Query Statement				
Collection Limiting					
Not collection limited					
○ Limit to collect	tion:				
Browse					
O Prompt for collection					
10	Cancel Apply H	elp			

Figure 8: Query Properties Dialog Box



5. In the **Query Statement Properties** dialog box, click the Add button to add a result to the list.

Chip PC Clients Query Statement Properties					
General Criteria Joins					
Specify the attributes to search for and how they will be displayed when the query is run.					
Find objects of type: System Resource					
<u>O</u> mit duplicate rows (select distinct)					
Besults:					
Class Attribute Sort					
Show Query Language OK Cancel Help					

Figure 9: Query Properties Dialog Box

6. In the **Result Properties** dialog box Click **Select...** to choose the attribute that will be added to the list.

R	Result Properties		×
	General		
	Result P	roperties	
	Attribute:		
			elect
	S <u>o</u> rt:	<unsorted></unsorted>	 ``
		OK Cancel	Help

Figure 10: Result Properties Dialog Box

Chapter 4 - Managing Thin Clients in the SMS Server



- 7. In the **Select Attribute** dialog box, perform the following:
 - 7.1. Select the desired **Attribute class** and then the specific **Attribute** in the corresponding drop down list box.

Select Attribute		×
Attribute <u>c</u> lass:	System Resource	•
	Alias as: <a>No Alias>	•
Attribute:	Nethics Name	Ţ
	Nelulus Name	
		4
	OK Cancel	

Figure 11: Select Attribute Dialog Box

7.2. Click **OK** to save your selection and return to the **Result Properties** dialog box (Notice the **Attribute** text box is now filled).

Result Propert	ies 🔉	<
General		
Be	sult Properties	
Attribute:	System Resource - Netbios Name	
	<u>S</u> elect	
S <u>o</u> rt:	<unsorted></unsorted>	
	OK Cancel Help	

Figure 12: Result Properties Dialog Box

8. Click **OK** to save selection and return to the **Query Statement Properties** Dialog Box.



9. The new attribute is now listed in the **General** tab of the **Query Statement Properties** dialog box. Additional attributes may be added as required.

IMPORTANT In order to run the **Resource Explorer** from the query results, the attribute, **Resource ID**, must be added to the results list.

Chin PC Thin	Clients Query	Statement Pro	nerties	X		
General C	iriteria Joins		percies			
N	Specify the attributes to search for and how they will be displayed when the query is run.					
Find objec	ts of type: Syste	em Resource				
<u>R</u> esults:	uplicate rows (sei	ect distincty	* 🗗	KEI		
Class		Attribute	Sort			
System F System R System R	lesource lesource lesource	Netbios Name SMS Unique Id Resource ID	≺Uns entifier ≺Uns ≺Uns	orted> orted>		
Show Que	ery Language	ОК	Cancel	Help		

Figure 13: Query Statement Properties Dialog Box



10. In the **Query Statement Properties** dialog box, select the **Criteria** tab. The **Criteria**: table lists the criteria used to filter the data for the query.

Chip PC Clients Query Statement Properties					
General Criteria Joins					
You can specify criteria to narrow the query and limit the results that are returned.					
<u>C</u> riteria:	<u>*</u> @ × *) 전 & !				
Show Query Language	OK Cancel Help				

Figure 14: Query Statement Properties Dialog Box - Criteria Tab

11. In the Criteria tab, click the button to add a criterion to the list.



12. In the **Criterion Properties** dialog box, perform the following:

Criterion Properties	;		×
General			
	Properties		
<u>Criterion</u> type:	Simple value		•
Where:			_
		<u>S</u> e	lect
Operator:			· -
<u>V</u> alue:			
	Type: String	Va	ļues
	ОК	Cancel	Help

Figure 15 Criterion: Properties Dialog Box

12.1. Click **Select...** to choose the attribute that will be examined in this criterion. The following **Select Attribute** dialog box opens.

Select Attribute		×
Attribute <u>c</u> lass:	System Resource	•
	Alias as: (No Alias)	•
A <u>t</u> tribute:	SMS Unique Identifier	•
	\searrow	
	OK Cancel	

Figure 16 Select Attribute Dialog Box

- 12.1.1. In the Attribute class drop-down list box, select the attribute class.
- 12.1.2. In the **Attribute** drop-down list box, select the specific attribute.
- 12.1.3. Click **OK** to return to the **Criterion Properties** dialog box.



- 12.2. In the **Operator** drop-down list box, select an operator.
- 12.3. In the Value text box, type in a value in order to complete the criterion.
 - **NOTE** Click **Values...** in order to open a browse dialog box and select a Value from the existing database records.

Criterion Propertie	5	×
General		
	n Properties	_
<u>C</u> riterion type:	Simple value] [
Where:	System Resource - SMS Unique Identifier	-
	<u>S</u> elect	
Operator:	is like] [
<u>⊻</u> alue:	%0005350%	-
	Type: String Values	
	Cancel Help	

Figure 17: Criterion Properties Dialog Box

13. Click **OK** to save your selection and return to the **Query Statement Properties** dialog box.



NOTE The new criterion will be listed in the Criteria tab of the Query Statement Properties dialog box. Additional criteria may be added as desired.

To created more complex queries, multiple criteria and various logical operators (and/or, not, brackets) may be used.

Chip PC Thin Clients Query	Statement Pro	perties	×
General Criteria Joins			,
You can specify criteria to r returned.	arrow the query a	and limit the result	s that are
<u>C</u> riteria:	*	😰 🗙 🔭 (t	9&1
System Resource.SMS Un	ique Identifier is li	ke ''%0005350%''	
			F
Show Query Language	ок	Cancel	Help

Figure 18: Query Statement Properties Dialog Box

IMPORTANT If different types of classes are used in the **Criteria** tab or the **General** tab, the **Joins** tab might need to be configured. This procedure is, however, outside the scope of this document.

- 14. Click OK to save your settings and return to the Query Properties dialog box.
- 15. In the Query Properties dialog box, click **OK** to save your settings and complete query creation.



2 Common Chip PC Thin Client Queries

The following table describes various criteria used to create queries that are commonly useful for Chip PC thin client asset management.

Table 4-1: Common Chip PC thin client queries

Description	Criteria
Chip PC thin clients	Class: System Resource Attribute: SMS Unique Identifier Operator: is like Value: %0005350%
Licensed clients	Class: System Resource Attribute: Netbios Name Operator: is not like Value: %_UNLICENSED
Unlicensed clients	Class: System Resource Attribute: Netbios Name Operator: is like Value: %_UNLICENSED
Clients of a particular model	Class: Computer System Attribute: Model Operator: is equal to Vale: <i><model number=""></model></i>

Chapter 4 - Managing Thin Clients in the SMS Server



Table 4-1: Common Chip PC thin client queries

Description	Criteria
Clients with a particular plug-in	Class: Add/Remove Programs Attribute: Display Name Operator: is equal to Vale: <i><plug-in name=""></plug-in></i>
Clients with a particular plug-in version	Class: Add/Remove Programs Attribute: Version Operator: is equal to Vale: <i><plug-in version=""></plug-in></i>
Clients with a particular firmware version	Class: Operating System Attribute: Build Number Operator: is equal to Vale: <i><fw version=""></fw></i>

NOTE It is possible to create complex queries combining multiple criteria with various logical operators (and/or, not, brackets). Remember that if different class types are used, it might be necessary to configure the **Join** parameters. Refer to SMS reference material for more information on this topic.

Chapter 4 - Managing Thin Clients in the SMS Server



3 Running a Query

- 1. Open the SMS Administrator Console and expand the relevant Site Database and Queries.
- 2. From the list of queries, select the desired query (in this example: **Chip PC Thin Clients**).
- 3. Right-click on the selected query to display a menu.
- 4. On the menu select **Run Query**.



Figure 19: SMS Administrator Console Window





5. The query results appear in the right pane.

🚡 sms - [Systems Management Server\	Site Database (972 - Chip PC)\Queri	ies\Chip PC Thin	Clients] 💶 🛛 🗙
<u>File Action View H</u> elp			
	ß		
Systems Management Server		Resource ID	▲
Gelestiese	KR_00053501872B_UNLICENSED	41	
	KR_000535018735_UNLICENSED	32 30	
Advertisements	KR_00053501873E_UNLICENSED	31 37	
		34	
Queries Grip PC Thin Clients	KR_00053501894D_ONLICENSED	27	
- 🙀 All Client Systems - 🙀 All Non-Client Systems	KR_000535018A39_UNLICENSED	35 36	
All Systems	KR_00053501C5F4	46 45	
All Systems with Specified S	KR_00053501EBED	44 11	
All User Groups	KR_000535020589	47	
All Users	CODE 1455	19 14	
All Windows 2000 Server Sy	KR_000535021DA0	7 20	
All Windows MT 4.0 Suctor	KR_000535021da4	22	-

Figure 20: SMS Administrator Console Window – Query Results

NOTE In the example above, notice how the unlicensed clients are marked by appendix string "_UNLICENSED" to their NetBIOS name.

IMPORTANT The query results will not update automatically. When the database is updated, re-run the query to display the most updated results.



Resource Explorer

The following section describes how to use the **Resource Explorer** in order to view Chip PC thin client asset management data.

1 Running the Resource Explorer

1. In the query results, select the desired Chip PC thin client.

IMPORTANT To run the **Resource Explorer** from the query results, the **Resource ID** attribute must be displayed in the results.

- 2. Right click on the selected thin client to display a menu.
- 3. On the menu select **All Tasks > Start Resource Explorer**.



Figure 21: SMS Administrator Console Window – Query Results - Menu



4. The **Resource Explorer** window opens:



Figure 22: Resource Explorer Window

Chapter 4 - Managing Thin Clients in the SMS Server



2 Using the Resource Explorer

The thin client data available via the **Resource Explorer** window is divided into three categories:

- Hardware current hardware and software information.
- Hardware History historical hardware and software data.
- Software contains no data regarding thin clients.
- 1. In the **Resource Explorer** window, expand **Hardware** to open a list of available **Inventory Groups.**
- 2. Select an **Inventory Group** (in this example: **Add\Remove Programs**) to display the available data for the thin client in this Inventory Group.



Figure 23: Resource Explorer Window





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Chapter 4 - Managing Thin Clients in the SMS Server