

SAMSUNG

Product Bulletin

TITLE: TAPI Service Provider V2.0

DATE: May 1, 1999

ISSUED BY: Product Department

BULLETIN NO.: 066-CTI

NO. OF PAGES: 1 of 13

Samsung Telecommunications America is pleased to announce the immediate availability of our newest DCS TAPI Service Provider Version 2.0. It replaces the earlier version 1.4. The TSP 2.0 is a hardware driver that allows the (CTM) Computer Telephony Module to communicate with a personal computer.

- I. The DCS TAPI Service Provider is compatible with the following Samsung DCS systems:

Product	Model	Software Version	Date
DCS	Compact	2.4 or higher	99.02.13
DCS	DCS	4.2 or higher	99.02.13
DCS	50si	version 1.1	99.04.20
DCS	400si	version 1.04	99.04.25

- II. The DCS TAPI Service Provider is compatible with the following Personal Computer (OS) Operating Systems:

OS Manufacturer	Version	Required Service Pack Patch Update	Required Microsoft Telecommunications Components	Required Operating System Installation Type
Windows 95 Products				
Microsoft	MS Windows 95 ®	Update to OSR2/25	Windows Telephony	Full
Microsoft	MS Windows 95® OSR1	Update to OSR2/25	Windows Telephony	Full
Microsoft	MS Windows 95® OSR25	Latest known MS Update	Windows Telephony	Full
Windows 98 Products				
Microsoft	MS Windows 98 ® Candidate 0		Windows Telephony	Full
Microsoft	MS Windows 98 ® Candidate 1		Windows Telephony	Full
Windows NT Products				
Microsoft	MS Windows NT Workstation 4.0	Update to SP3	Windows Telephony	Standard
Microsoft	MS Windows NT Workstation 4.0 SP3	Update to SP4	Windows Telephony	Standard
Microsoft	MS Windows NT Workstation 4.0 SP4	Latest known MS Update	Windows Telephony	Standard

The Samsung logo, consisting of the word "SAMSUNG" in white, bold, sans-serif capital letters, set against a dark, horizontally-oriented oval background.

Product Bulletin

TITLE: TAPI Service Provider V2.0

DATE: May 1, 1999

ISSUED BY: Product Department

BULLETIN NO.: 066-CTI

NO. OF PAGES: 2 of 13

- III. The DCS TAPI Service Provider is compatible with the following Microsoft TAPI function calls:

The following table indicates the TAPI Function Calls as described by Microsoft® TAPI Standards and its corresponding Function Call supported by the Samsung DCS TSP 2.0 driver, (○ – Indicates Implemented / ✕ - Indicates Not implemented). Before committing that a specific third party, TAPI compliant application will work with the TSP 2.0, it is strongly recommended that this list be sent to the third party software application vendor and/or manufacturer for review prior to any sale. Only the application vendor/manufacturer can determine that the TAPI Function Calls required by their application are available in the DCS TSP 2.0.

Not every third party application requires all TAPI Function Calls and not every PBX manufacturer supports all the Function Calls in the Microsoft® TAPI table. The Samsung TSP 2.0 is fully compliant only with selected MS TAPI functions.

SPECIAL NOTICE

Samsung Telecommunications America, Inc. is not obligated to modify, update and/or change its DCS TSP 2.0 to meet or satisfy third party vendor requirements.

TITLE: TAPI Service Provider V2.0
 DATE: May 1, 1999
 ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
 NO. OF PAGES: 3 of 13

TAPI COMPATIBILITY TABLE

NO.	TSP 2.0	TSP 2.1	Microsoft TSPI Functions (Service Provider Interface)	Microsoft TAPI Functions (Application Programming Interface)	Smart Control
1	✗	✗	TSPI lineAccept	LineAccept	✗
2				LineAddProvider	✗
3	○	○	TSPI lineAddToConference	LineAddToConference	○
4				LineAgentSpecific	✗
5	○	○	TSPI lineAnswer	LineAnswer	○
6	○	○	TSPI lineBlindTransfer	LineBlindTransfer	○
7				LineCallbackFunc	○
8	○	○	TSPI lineClose	LineClose	✗
9	○	○	TSPI lineCloseCall		
10	○	○	TSPI lineCompleteCall	LineCompleteCall	○
11	○	○	TSPI lineCompleteTransfer	LineCompleteTransfer	✗
12	○	○	TSPI lineConditionalMediaDetection		
13	○	○	TSPI lineConfigDialog	LineConfigDialog	✗
14	✗	○	TSPI lineConfigDialogEdit	LineConfigDialogEdit	✗
15				LineConfigProvider	✗
16				LineCreateAgent	✗
17				LineCreateAgentSession	✗
18				LineDeallocateCall	○
19	○	○	TSPI lineDevSpecific	LineDevSpecific	○
20	✗	✗	TSPI lineDevSpecificFeature	LineDevSpecificFeature	✗
21	○	○	TSPI lineDial	lineDial	○
22	○	○	TSPI lineDrop	lineDrop	○
23	✗	✗	TSPI lineDropNoOwner		
24	✗	✗	TSPI lineDropOnClose		
25	○	○	TSPI lineForward	lineForward	○
26	✗	✗	TSPI lineGatherDigits	LineGatherDigits	✗
27	○	○	TSPI lineGenerateDigits	LineGenerateDigits	○
28	✗	✗	TSPI lineGenerateTone	LineGenerateTone	✗
29	○	○	TSPI lineGetAddressCaps	LineGetAddressCaps	○
30	○	○	TSPI lineGetAddressID	LineGetAddressID	✗
31	○	○	TSPI lineGetAddressStatus	LineGetAddressStatus	○
32				LineGetAgentActivityList	✗
33				LineGetAgentCaps	✗
34				LineGetAgentGroupList	✗
35				LineGetAgentInfo	✗
36				LineGetAgentStatus	✗
37				LineGetAppPriority	✗
38	○	○	TSPI lineGetCallAddressID		
39	○	○	TSPI lineGetCallInfo	LineGetCallInfo	○
40	○	○	TSPI lineGetCallStatus	LineGetCallStatus	○
41				LineGetConfRelatedCalls	○
42				LineGetCountry	○
43	○	○	TSPI lineGetDevCaps	LineGetDevCaps	○
44	✗	○	TSPI lineGetDevConfig	LineGetDevConfig	✗
45				LineGetGroupList	✗
46	○	○	TSPI lineGetExtensionID		
47	✗	✗	TSPI lineGetIcon	lineGetIcon	✗
48	○	○	TSPI lineGetID	lineGetID	✗
49	○	○	TSPI lineGetLineDevStatus	LineGetLineDevStatus	○
50				LineGetMessage	✗

TITLE: TAPI Service Provider V2.0
 DATE: May 1, 1999
 ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
 NO. OF PAGES: 4 of 13

NO.	TSP 2.0	TSP 2.1	Microsoft TSPI Functions (Service Provider Interface)	Microsoft TAPI Functions (Application Programming Interface)	Smart Control
51				LineGetNewCalls	×
52	○	○	TSPI lineGetNumAddressIDs		
53				LineGetNumRings	×
54				LineGetProviderList	×
55				LineGetProxyStatus	×
56				LineGetQueueInfo	×
57				LineGetQueueList	×
58				LineGetRequest	×
59				LineGetStatusMessages	×
60				lineGetTranslateCaps	○
61				lineHandoff	×
62	○	○	TSPI lineHold	lineHold	○
63				lineInitialize	×
64				lineInitializeEx	○
65	○	○	TSPI lineMakeCall	lineMakeCall	○
66	×	×	TSPI lineMonitorDigits	lineMonitorDigits	×
67	×	×	TSPI lineMonitorMedia	lineMonitorMedia	×
68	×	×	TSPI lineMonitorTones	lineMonitorTones	×
69				lineNegotiateAPIVersion	○
70	○	○	TSPI lineNegotiateExtVersion	lineNegotiateExtVersion	○
71	○	○	TSPI lineNegotiateTSPIVersion		
72	○	○	TSPI lineOpen	lineOpen	○
73	×	×	TSPI linePark	linePark	×
74	○	○	TSPI linePickup	linePickup	○
75	○	○	TSPI linePrepareAddToConference	LinePrepareAddToConference	○
76				lineProxyMessage	×
77				lineProxyResponse	×
78	×	○	TSPI lineRedirect	lineRedirect	×
79				LineRegisterRequestRecipient	×
80	×	×	TSPI lineReleaseUserUserInfo	lineReleaseUserUserInfo	×
81	×	○	TSPI lineRemoveFromConference	LineRemoveFromConference	×
82				lineRemoveProvider	×
83	×	×	TSPI lineSecureCall	LineSecureCall	×
84	○	○	TSPI lineSelectExtVersion		
85	×	×	TSPI lineSendUserUserInfo	lineSendUserUserInfo	×
86				lineSetAgentActivity	×
87				lineSetAgentGroup	×
88				LineSetAgentMeasurementPeriod	×
89				lineSetAgentSessionState	×
90				lineSetAgentState	×
91				lineSetAppPriority	×
92	×	×	TSPI lineSetAppSpecific	lineSetAppSpecific	×
93	×	○	TSPI lineSetCallData	lineSetCallData	×
94	×	○	TSPI lineSetCallParams	lineSetCallParams	×
95				lineSetCallPrivilege	×
96	×	×	TSPI lineSetCallQualityOfService	LineSetCallQualityOfService	×
97	×	×	TSPI lineSetCallTreatment	lineSetCallTreatment	×
98	×	×	TSPI lineSetCurrentLocation	lineSetCurrentLocation	×
99	○	○	TSPI lineSetDefaultMediaDetection		
100	×	×	TSPI lineSetDevConfig	lineSetDevConfig	×
101	×	×	TSPI lineSetLineDevStatus	lineSetLineDevStatus	×
102	×	×	TSPI lineSetMediaControl	lineSetMediaControl	×
103	×	○	TSPI lineSetMediaMode	lineSetMediaMode	×

TITLE: TAPI Service Provider V2.0
 DATE: May 1, 1999
 ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
 NO. OF PAGES: 5 of 13

NO.	TSP 2.0	TSP 2.1	Microsoft TSPI Functions (Service Provider Interface)	Microsoft TAPI Functions (Application Programming Interface)	Smart Control
104				lineSetNumRings	✗
105				LineSetQueueMeasurementPeriod	✗
106	○	○	TSPI_lineSetStatusMessages	lineSetStatusMessages	○
107	✗	✗	TSPI_lineSetTerminal	lineSetTerminal	✗
108				lineSetTollList	✗
109	○	○	TSPI_lineSetupConference	lineSetupConference	○
110	○	○	TSPI_lineSetupTransfer	lineSetupTransfer	○
111				lineShutdown	○
112	✗	○	TSPI_lineSwapHold	lineSwapHold	○
113				lineTranslateAddress	○
114				lineTranslateDialog	✗
115	✗	✗	TSPI_lineUncompleteCall	lineUncompleteCall	✗
116	○	○	TSPI_lineUnhold	lineUnhold	○
117	✗	○	TSPI_lineUnpark	lineUnpark	✗
118				phoneCallbackFunc	✗
119	✗	✗	TSPI_phoneClose	phoneClose	✗
120	✗	✗	TSPI_phoneConfigDialog	phoneConfigDialog	✗
121	✗	✗	TSPI_phoneDevSpecific	phoneDevSpecific	✗
122	✗	✗	TSPI_phoneGetButtonInfo	phoneGetbuttonInfo	✗
123	✗	✗	TSPI_phoneGetData	phoneGetData	✗
124	✗	✗	TSPI_phoneGetDevCaps	phoneGetDevCaps	✗
125	✗	✗	TSPI_phoneGetDisplay	phoneGetDisplay	✗
126	✗	✗	TSPI_phoneGetExtensionID		
127	✗	✗	TSPI_phoneGetGain	phoneGetGain	✗
128	✗	✗	TSPI_phoneGetHookSwitch	phoneGetHookSwitch	✗
129	✗	✗	TSPI_phoneGetIcon	phoneGetIcon	✗
130	✗	✗	TSPI_phoneGetID	phoneGetID	✗
131	✗	✗	TSPI_phoneGetLamp	phoneGetLamp	✗
132				phoneGetMessage	✗
133	✗	✗	TSPI_phoneGetRing	phoneGetRing	✗
134	✗	✗	TSPI_phoneGetStatus	phoneGetStatus	✗
135				phoneGetStatusMessages	✗
136	✗	✗	TSPI_phoneGetVolume	phoneGetVolume	✗
137				phoneInitialize	✗
138				phoneInitializeEx	✗
139				phoneNegotiateAPIVersion	✗
140	✗	✗	TSPI_phoneNegotiateExtVersion	phoneNegotiateExtVersion	✗
141	✗	✗	TSPI_phoneNegotiateTSPIVersion		
142	✗	✗	TSPI_phoneSelectExtVersion		
143	✗	✗	TSPI_phoneOpen	phoneOpen	✗
144	✗	✗	TSPI_phoneSetButtonInfo	phoneSetButtonInfo	✗
145	✗	✗	TSPI_phoneSetData	phoneSetData	✗
146	✗	✗	TSPI_phoneSetDisplay	phoneSetDisplay	✗
147	✗	✗	TSPI_phoneSetGain	phoneSetGain	✗
148	✗	✗	TSPI_phoneSetHookSwitch	phoneSetHookSwitch	✗
149	✗	✗	TSPI_phoneSetLamp	phoneSetLamp	✗
150	✗	✗	TSPI_phoneSetRing	phoneSetRing	✗
151	✗	✗	TSPI_phoneSetStatusMessages	phoneSetStatusMessages	✗
152	✗	✗	TSPI_phoneSetVolume	phoneSetVolume	✗
153				phoneShutdown	✗
154					
155				tapiGetLocationInfo	✗

TITLE: TAPI Service Provider V2.0
 DATE: May 1, 1999
 ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
 NO. OF PAGES: 6 of 13

NO.	TSP 2.0	TSP 2.1	Microsoft TSPI Functions (Service Provider Interface)	Microsoft TAPI Functions (Application Programming Interface)	Smart Control
156				tapiRequestDrop	✗
157				tapiRequestMakeCall	✗
158				rapiRequestMediaCall	✗
159	○	○	ASYNCH COMPLETION		
160	○	○	LINEEVENT		
161	✗	✗	PHONEEVENT		
162	○	○	TSPI_providerConfig		
163	✗	○	TSPI_providerCreateLineDevice		
164	✗	✗	TSPI_providerCreatePhoneDevice		
165	○	○	TSPI_providerEnumDevices		
166	○	○	TSPI_providerInit		
167	○	○	TSPI_providerInstall		
168	○	○	TSPI_providerRemove		
169	○	○	TSPI_providerShutdown		
170	○	○	Device specific - StationLock		
171	○	○	DeviceSpecific - Vacant Station message		
172	○	○	Device Specific - Follow me		
173	○	○	DeviceSpecific - Make new trunk call		
174	○	○	Device specific - Page		
175	○	○	Device Specific - System hold retrieval		

Note: The list of device specific features are listed from 170 onwards.

IV. STA support is **limited** only to Samsung Products:

- DCS hardware and software
- CTM installation and troubleshooting
- TSP installation and troubleshooting

TITLE: TAPI Service Provider V2.0
DATE: May 1, 1999
ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
NO. OF PAGES: 7 of 13

V. Caller ID/ANI/DNIS for CTI

The most popular use for CTI applications is to have screen pops generated by incoming calls. The following are helpful tips regarding screen pops.

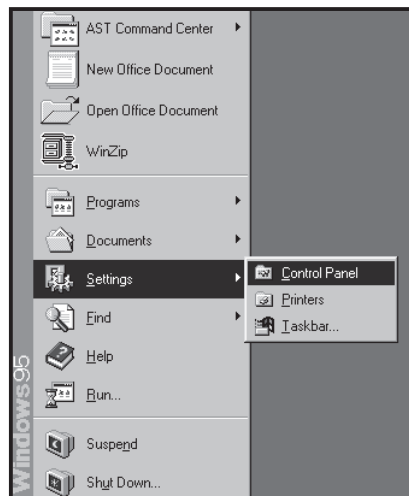
- a) The local or long distance carrier must deliver Caller ID, ANI or DNIS.
- b) The Samsung telephone system must be is equipped to support Caller ID, ANI or DNIS.
- c) The Samsung telephone system must be correctly configured to receive and pass the Caller ID, ANI or DNIS information.
- d) The CID/ANI/DNIS information must match an entry in an existing database for a screen pop to occur.
- e) First time callers information will have to be inputed.
- f) Sometimes international phone calls, CID blocked numbers or some carriers will not pass any Caller ID, ANI or DNIS information, no screen pops would be generated under those circumstances (unavailable, out of area, etc.).

TITLE: TAPI Service Provider V2.0
DATE: May 1, 1999
ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
NO. OF PAGES: 8 of 13

VI. TSP 2.0 TEST PROCEDURES

- 1) Click **Start**, move pointer to **Settings** and then click at **Control Panel**



Windows Desktop Start

- 2) Locate the MS **telephony** applet by either pressing the down arrow key or drag the right pull down control bar.

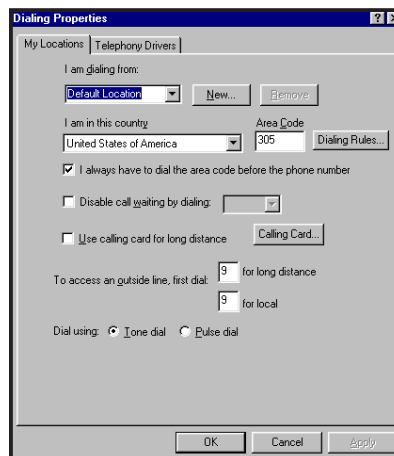


Control Panel Dialog Box

TITLE: TAPI Service Provider V2.0
DATE: May 1, 1999
ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
NO. OF PAGES: 9 of 13

- 3) Double click the **telephony applet**.
- 4) The **DIALING PROPERTY** panel with **My Locations** and **Telephony Drivers** tabs should appear next.



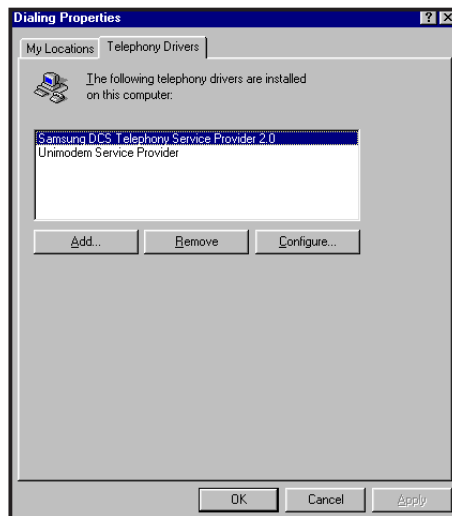
Dialing Property Dialog

- 5) Verify that the following settings are correctly configured:
 - ✓ I am calling from (create a location that indicates where you are calling from)
 - ✓ I am in this country/region (select from the pull down option the applicable country)
 - ✓ Area Code Rules (if you are in a region that needs 10 digit dialing or needs to include or exclude area codes, please set correctly this option)
 - ✓ If the user is using calling card for long distance services (enter the carrier information and/or correct information)

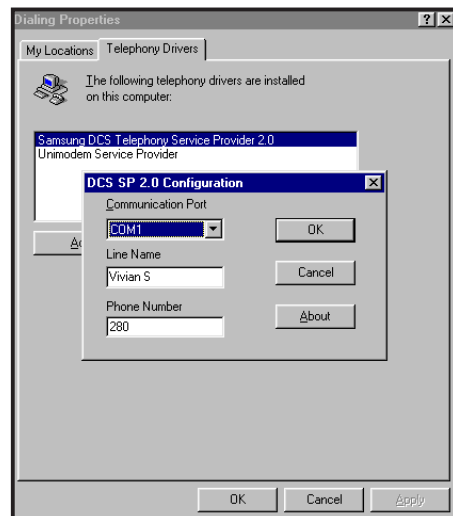
TITLE: TAPI Service Provider V2.0
DATE: May 1, 1999
ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
NO. OF PAGES: 10 of 13

- 6) Click at **Telephony Drivers** and verify that the **Samsung DCS Telephony Service Provider 2.0** is present and properly setup.



Telephony Drivers Dialog



TSP Setup

- 7) Point the cursor to the **Samsung DCS Telephony Service Provider 2.0** and double click on it. Make all necessary changes and verify that the settings are correct. Click OK to confirm, click apply, close all the windows and changes would be immediately applied to OS. Select the communications port to which the CTM is connected to.

TITLE: TAPI Service Provider V2.0
DATE: May 1, 1999
ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
NO. OF PAGES: 11 of 13

- 8) Windows 98® users: click **Start**, move the pointer to **Programs**, **Accessories**, **Communications** and locate the **MS Phone Dialer** then click on it.

Windows 95® users: click **Start**, move the pointer to **Programs**, **Accessories**, **Communications** and locate the **MS Phone Dialer** then click on it.



Phone Dialer

- 9) Point and click **tools** and then click the **connect using option**.

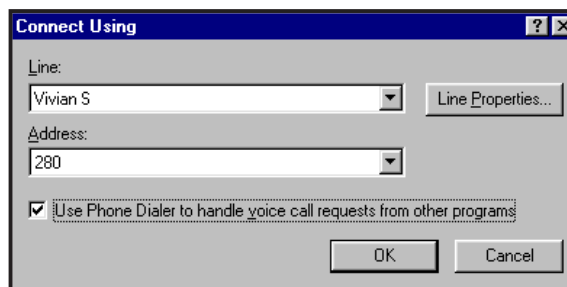


Phone Dialer Tools

TITLE: TAPI Service Provider V2.0
DATE: May 1, 1999
ISSUED BY: Product Department

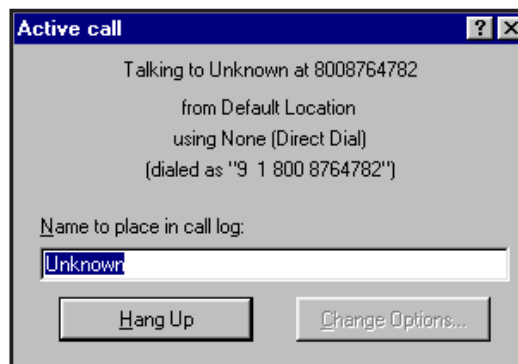
BULLETIN NO.: 066-CTI
NO. OF PAGES: 12 of 13

- 10) After clicking, the dialog box should show the newly installed TSPI device line (line is any reference you want to use to name the device) and address (the station or extension number assigned to the user's keyset, also the directory number to which your CTM is attached to. This will be the 3 or 4 digits extension number of the keyset).



Connect Using

- 11) Click and check mark the option **“Use phone dialer to handle voice call requests from other programs”**, close the dialog.
- 12) Point and click the arrow located underneath the **number to dial:**, type the desired number without the (9) or any other access code assigned on your DCS.
- 13) Click on **dial** and the active call dialog will pop, at this time you have completed the testing and your system is ready.



Dialing using MS Phone Dialer

If you see this screen, you have completed the Samsung DCS TSP 2.0 installation successfully!

The Samsung logo, consisting of the word "SAMSUNG" in white, bold, sans-serif capital letters, is centered within a dark, horizontally-oriented oval.

Product Bulletin

TITLE: TAPI Service Provider V2.0
DATE: May 1, 1999
ISSUED BY: Product Department

BULLETIN NO.: 066-CTI
NO. OF PAGES: 13 of 13

VII. HELPFUL INFORMATION

- NOTE: If your PC does not have the Microsoft® Telephony TAPI Services visit the Microsoft® site at **<http://www.microsoft.com>**.
- Should your PC require Microsoft® updates please visit:
<http://windowsupdate.microsoft.com>
- Should your PC require Microsoft® TAPI components please visit:
<http://microsoft.com/communications/telephony.htm>