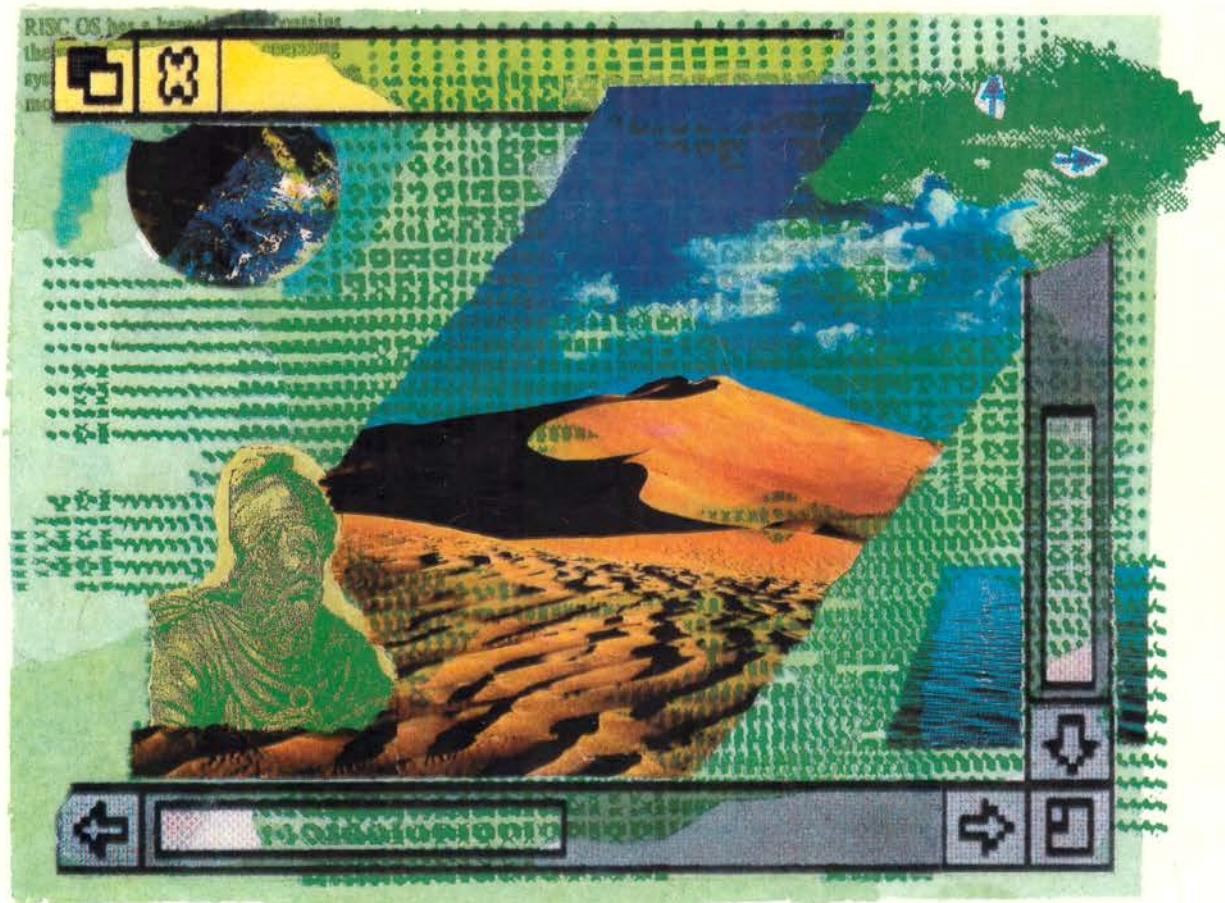


# RISC OS 3

# Programmer's Reference Manual

## Indexes



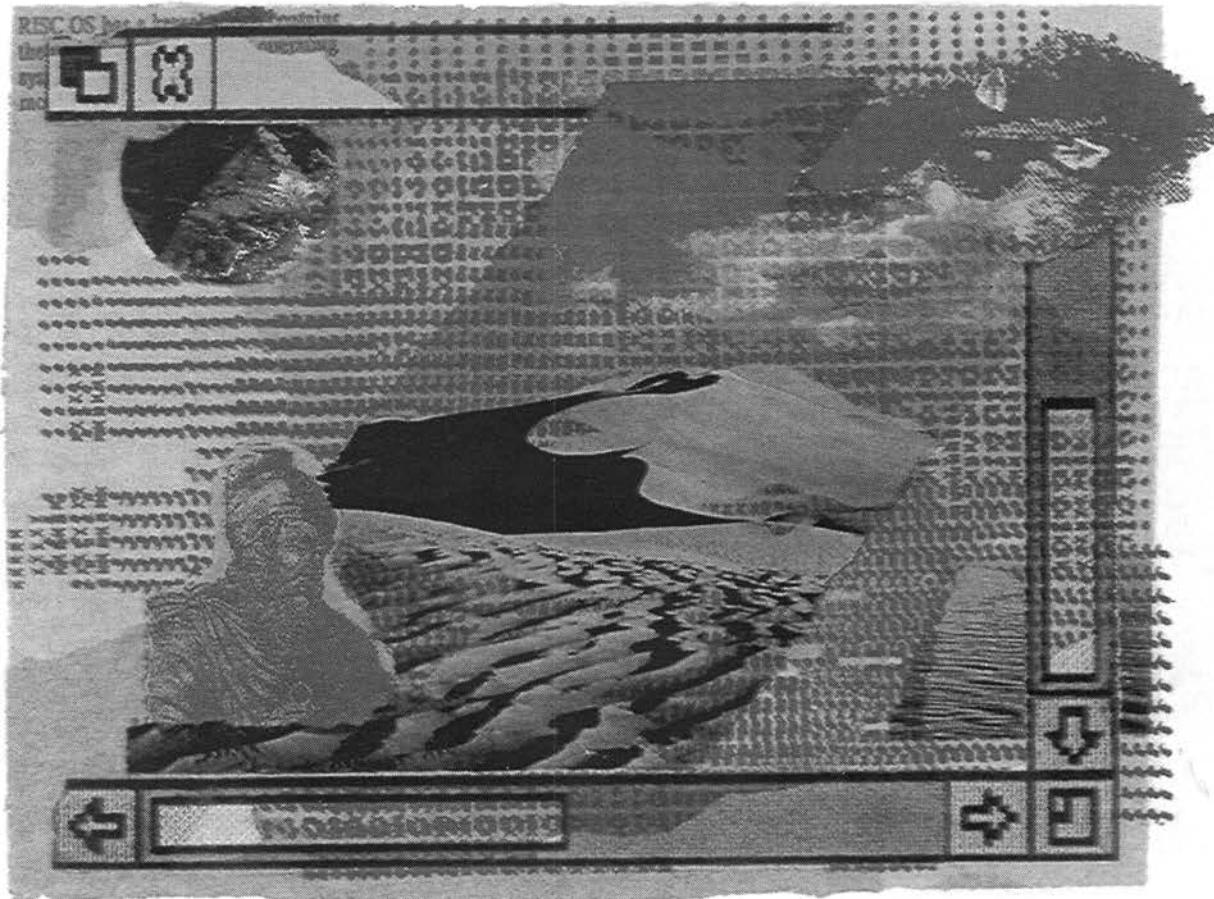
Including supplement for version 3.6

Acorn

# RISC OS 3

## Programmer's Reference Manual

### Indexes



Including supplement for version 3.6

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223 (&DF)	Read/write interpretation of input values &E0 - &EF	1-891
224 (&E0)	Read/write interpretation of input values &F0 - &FF	1-891
225 (&E1)	Read/write function key interpretation	1-891
226 (&E2)	Read/write Shift function key interpretation	1-891
227 (&E3)	Read/write Ctrl function key interpretation	1-891
228 (&E4)	Read/write Ctrl Shift function key interpretation	1-891
229 (&E5)	Read/write Escape key status	1-894
230 (&E6)	Read/write escape effects	1-896
236 (&EC)	Read/write character destination status	1-514
237 (&ED)	Read/write cursor key status	1-898
238 (&EE)	Read/write numeric keypad interpretation	1-900
240 (&F0)	Read country flag	3-774
242 (&F2)	Read RS423 baud rates	2-457
243 (&F3)	Read timer switch state	1-407
245 (&F5)	Read printer driver type	1-515
246 (&F6)	Read/write printer ignore character	1-517
247 (&F7)	Read/write Break key actions	1-902
250 (&FA)	Read VDU driver screen bank number	1-671
251 (&FB)	Read display screen bank number	1-672
253 (&FD)	Read last break type	1-904, 5a-248
254 (&FE)	Set effect of Shift Ctrl on numeric keypad	1-906
255 (&FF)	Read/write boot option	2-28



# Index of OS\_Words

<b>OS_Word</b>	<b>Description</b>	<b>Page</b>
0 (&00)	Read line from input stream to memory	1-908
1 (&01)	Read system clock	1-407
2 (&02)	Write system clock	1-411
3 (&03)	Read interval timer	1-412
4 (&04)	Write interval timer	1-413
9 (&09)	Read pixel logical colour	1-673, 5a-114
10 (&0A)	Read a character definition	1-675
11 (&0B)	Read the palette	1-677, 5a-114
12 (&0C)	Write the palette	1-679, 5a-114
13 (&0D)	Read current and last graphics cursors	1-681
14 (&0E)	Read CMOS clock	1-415 to 1-422
15 (&0F)	Write CMOS clock	1-423 to 1-428
21 (&15)	Define pointer and mouse parameters	1-683 to 1-696
22 (&16)	Write screen base address	1-697



# Numeric index of Service Calls

The names given below omit the initial 'Service\_-' for clarity:

No	Name	Meaning	Page
&04	UKCommand	Unknown command	1-255
&06	Error	Error has occurred	1-256
&07	UKByte	Unknown OS_BytE	1-257
&08	UKWord	Unknown OS_WOrd	1-258
&09	Help	*Help has been called	1-259
&0B	ReleaseFIQ	Release FIQ	1-135
&0C	ClaimFIQ	Claim FIQ	1-136
&11	Memory	Memory controller about to be remapped	3-68
&12	StartUpFS	Start up filing system	2-22
&27	Reset	Post-Reset	3-69
&28	UKConfig	Unknown *Configure	1-260
&29	UKStatus	Unknown *Status	1-261
&2A	NewApplication	Application about to start	1-262
&40	FSRedeclare	Start up filing system	2-23
&41	Print	For internal use only	3-598
&42	LookupFileType	Look up file type	1-263
&43	International	International service	3-763
&44	Keyhandler	Keyboard handler	1-851
&45	PreReset	Pre-reset	4-134
&46	ModeChange	Mode change	1-617
&47	ClaimFIQinBackground	Claim FIQ in background	1-137
&48	ReAllocatePorts	Econet restarting	2-642
&49	StartWimp	Start up any resident module tasks using Wimp_StartTask	3-70
&4A	StartedWimp	Request to task modules to set taskHandle variable to zero	3-72
&4B	StartFiler	Request to filing-system-specific desktop filers to start up	2-490

No	Name	Meaning	Page
&4C	StartedFiler	Request to filing-system-specific desktop filers to set taskHandle variable to zero	2-492
&4D	PreModeChange	Mode change	1-618
&4E	MemoryMoved	OS_ChangeDynamicArea has just finished	1-361
&4F	FilerDying	Notification that the Filer module is about to close down	2-493
&50	ModeExtension	Allow soft modes	1-620, 5a-124
&51	ModeTranslation	Translate modes for unknown monitor types	1-624, 5a-112
&52	MouseTrap	The Wimp has detected a significant mouse movement	3-74
&53	WimpCloseDown	Notification that the Window Manager is about to close down a task	3-75
&54	Sound	Parts of the Sound system are starting or dying	4-17
&55	NetFS	Either a *Logon, a *Bye or a *SDisc/*Mount has occurred	2-342
&56	EconetDying	Econet is about to leave	2-643, 5a-666
&57	WimpReportError	Request to suspend trapping of VDU output so an error can be displayed	3-77
&59	ResourceFSStarted	The file structure inside ResourceFS has changed	2-411
&5A	ResourceFSDying	ResourceFS is killed	2-412
&5B	CalibrationChanged	Screen calibration is changed	3-344
&5C	WimpSaveDesktop	Save some state to a desktop boot file	3-78
&5D	WimpPalette	Palette change	3-79
&5E	MessageFileClosed	Message files have been closed	3-741
&5F	NetFSDying	NetFS is dying	2-343
&60	ResourceFSStarting	ResourceFS module is reloaded or reinitialised	2-413

No	Name	Meaning	Page
&64	TerritoryManagerLoaded	Tell territory modules to register themselves.	3-790
&65	PDriverStarting	PDriver sharer module started	3-599
&66	PDumperStarting	PDumperDP module starting up	3-676
&67	PDumperDying	PDumperDP module dying	3-677
&68	CloseFile	Close an object, and any children of that object	2-24
&69	IdentifyDisc	Identify disc format	2-218
&6A	EnumerateFormats	Enumerate available disc formats	2-494
&6B	IdentifyFormat	Identify disc format name	2-277
&6C	DisplayFormatHelp	Display list of available formats	2-278
&6D	ValidateAddress	OS_ValidateAddress has been called with an unrecognised area	1-362
&6E	FontsChanged	New Font\$Path detected	3-417
&6F	BufferStarting	Notifies modules that the buffer manager is starting	4-85
&70	DeviceFSStarting	DeviceFS is starting	2-424
&71	DeviceFSDying	DeviceFS is dying	2-425
&72	SwitchingOutputToSprite	Output switched to sprite, mask or screen	1-760
&73	PostInit	All modules have been initialised	1-264
&75	TerritoryStarted	New territory starting	3-791
&76	MonitorLeadTranslation	Translate monitor lead ID	1-625, 5a-112
&78	PDriverGetMessage	Get common messages file	3-600
&79	DeviceDead	Device has been killed by DeviceFS	2-426
&7A	ScreenBlanked	Screen blanked by screen blunker	4-108
&7B	ScreenRestored	Screen restored by screen blunker	4-109
&7C	DesktopWelcome	Desktop starting	3-80
&7D	DiscDismounted	Disc dismounted	2-496
&7E	ShutDown	Switcher shutting down	3-81
&7F	PDriverChanged	Currently selected printer driver has changed	3-601, 5a-670

No	Name	Meaning	Page
&80	ShutdownComplete	Shutdown completed	3-82
&81	DeviceFSCloseRequest	Opening a device which already has the maximum number of streams open	2-427
&82	InvalidateCache	Broadcast whenever the cache is flushed within ColourTrans	3-345
&83	ProtocolDying	Part of the AUN Driver Control Interface	2-644
&84	FindNetworkDriver	Part of the AUN Driver Control Interface	2-645
&85	WimpSpritesMoved	Wimp sprite pools have moved	3-77
&86	WimpRegisterFilters	Allows the Filter Manager to install filters with the Window Manager	3-77
&87	FilterManagerInstalled	Filter Manager starting up	3-304
&88	FilterManagerDying	Filter Manager dying	3-305
&89	ModeChanging	Mode change	1-627
&8A	Portable	Power down or up	4-197
&8B	NetworkDriverStatus	Part of the AUN Driver Control Interface	2-646
&8C	SyntaxError	Syntax error translation	1-265
&8D	EnumerateScreenModes	Enumerates the available screen modes	5a-128
&8E	PagesUnsafe	Pages specified are about to be swapped for different pages	5a-46
&8F	PagesSafe	Pages specified have been swapped for different pages	5a-47
&90	DynamicAreaCreate	Dynamic area has just been successfully created	5a-48
&91	DynamicAreaRemove	Dynamic area is about to be removed	5a-49
&92	DynamicAreaRenumber	Dynamic area is being renumbered	5a-50
&93	ColourPickerLoaded	For internal use only	5a-556
&9B	EnumerateNetworkDrivers	Issued to obtain a linked list of all active network device drivers	5a-458

No	Name	Meaning	Page
&9D	DCIDriverStatus	Issued by a network device driver module once initialised, and when finalising	5a-460
&9E	DCIFrameTypeFree	Part of the AUN Driver Control Interface	5a-460
&9F	DCIProtocolStatus	Issued by a protocol module once it has initialised, and when it is finalising	5a-461
&B0	InternetStatus	Issued by the Internet module when an interface address has been changed	5a-462
&10800	ADFSPodule	Issued by ADFS to locate an ST506 expansion card	4-135
&10801	ADFSPoduleIDE	Issued by ADFS to locate an IDE expansion card	4-136
&10802	ADFSPoduleIDEDying	IDE expansion card dying	4-137
&400C0	ErrorStarting	Issued immediately after Wimp_ReportError is called	5a-495
&400C1	ErrorButtonPressed	Issued when any button on the error report is pressed	5a-496
&400C2	ErrorEnding	Issued immediately before an error report closes	5a-497
&40200	NetPrintCheckD1	Issued by NetPrint to determine if there is a local printer server running	5a-212
&45540	DrawObjectRender	Issued when the SWI DrawFile_Render encounters an unrecognised object	5a-520
&45541	DrawObjectDeclareFonts	Issued when the SWI DrawFile_DeclareFonts encounters an unrecognised object	5a-521



# Alphabetic index of Service Calls

The names given below omit the initial 'Service\_-' for clarity:

Name	No	Meaning	Page
ADFSPodule	&10800	Issued by ADFS to locate an ST506 expansion card	4-135
ADFSPoduleIDE	&10801	Issued by ADFS to locate an IDE expansion card	4-136
ADFSPoduleIDEDying	&10802	IDE expansion card dying	4-137
BufferStarting	&6F	Notifies modules that the buffer manager is starting	4-85
CalibrationChanged	&5B	Screen calibration is changed	3-344
ClaimFIQ	&0C	Claim FIQ	1-136
ClaimFIQinBackground	&47	Claim FIQ in background	1-137
CloseFile	&68	Close an object, and any children of that object	2-24
ColourPickerLoaded	&93	For internal use only	5a-556
DCIDriverStatus	&9D	Issued by a network device driver module once initialised, and when finalising	5a-460
DCIFrameTypeFree	&9E	Part of the AUN Driver Control Interface	5a-460
DCIProtocolStatus	&9F	Issued by a protocol module once it has initialised, and when it is finalising	5a-461
DesktopWelcome	&7C	Desktop starting	3-80
DeviceDead	&79	Device has been killed by DeviceFS	2-426
DeviceFSCloseRequest	&81	Opening a device which already has the maximum number of streams open	2-427
DeviceFSDying	&71	DeviceFS is dying	2-425
DeviceFSStarting	&70	DeviceFS is starting	2-424
DiscDismounted	&7D	Disc dismounted	2-496
DisplayFormatHelp	&6C	Display list of available formats	2-278

Name	No	Meaning	Page
DrawObjectRender	&45540	Issued when the SWI DrawFile_Render encounters an unrecognised object	5a-520
DrawObjectDeclareFonts	&45541	Issued when the SWI DrawFile_DeclareFonts encounters an unrecognised object	5a-521
DynamicAreaCreate	&90	Dynamic area has just been successfully created	5a-48
DynamicAreaRemove	&91	Dynamic area is about to be removed	5a-49
DynamicAreaRenumber	&92	Dynamic area is being renumbered	5a-50
EconetDying	&56	Econet is about to leave	2-643, 5a-666
EnumerateFormats	&6A	Enumerate available disc formats	2-494
EnumerateNetworkDrivers	&9B	Issued to obtain a linked list of all active network device drivers	5a-458
EnumerateScreenModes	&8D	Enumerates the available screen modes	5a-128
Error	&06	Error has occurred	1-256
ErrorButtonPressed	&400C1	Issued when any button on the error report is pressed	5a-496
ErrorEnding	&400C2	Issued immediately before an error report closes	5a-497
ErrorStarting	&400C0	Issued immediately after Wimp_ReportError is called	5a-495
FilerDying	&4F	Notification that the Filer module is about to close down	2-493
FilterManagerDying	&88	Filter Manager dying	3-305
FilterManagerInstalled	&87	Filter Manager starting up	3-304
FindNetworkDriver	&84	Part of the AUN Driver Control Interface	2-645
FontsChanged	&6E	New Font\$Path detected	3-417
FSRedeclare	&40	Start up filing system	2-23
Help	&09	*Help has been called	1-259
IdentifyDisc	&69	Identify disc format	2-218

Name	No	Meaning	Page
IdentifyFormat	&6B	Identify disc format name	2-277
International	&43	International service	3-763
InternetStatus	&B0	Issued by the Internet module when an interface address has been changed	5a-462
InvalidateCache	&82	Broadcast whenever the cache is flushed within ColourTrans	3-345
Keyhandler	&44	Keyboard handler	1-851
LookupFileType	&42	Look up file type	1-263
Memory	&11	Memory controller about to be remapped	3-68
MemoryMoved	&4E	OS_ChangeDynamicArea has just finished	1-361
MessageFileClosed	&5E	Message files have been closed	3-741
ModeChange	&46	Mode change	1-617
ModeChanging	&89	Mode change	1-627
ModeExtension	&50	Allow soft modes	1-620, 5a-124
ModeTranslation	&51	Translate modes for unknown monitor types	1-624, 5a-112
MonitorLeadTranslation	&76	Translate monitor lead ID	1-625, 5a-112
MouseTrap	&52	The Wimp has detected a significant mouse movement	3-74
NetFS	&55	Either a *Logon, a *Bye or a *SDisc/*Mount has occurred	2-342
NetFSDying	&5F	NetFS is dying	2-343
NetPrintCheckD1	&40200	Issued by NetPrint to determine if there is a local printer server running	5a-212
NetworkDriverStatus	&8B	Part of the AUN Driver Control Interface	2-646
NewApplication	&2A	Application about to start	1-262
PagesSafe	&8F	Pages specified have been swapped for different pages	5a-47
PagesUnsafe	&8E	Pages specified are about to be swapped for different pages	5a-46

Name	No	Meaning	Page
PDriverChanged	&7F	Currently selected printer driver has changed	3-601, 5a-670
PDriverGetMessage	&78	Get common messages file	3-600
PDriverStarting	&65	PDriver sharer module started	3-599
PDumperDying	&67	PDriverDP module dying	3-677
PDumperStarting	&66	PDriverDP module starting up	3-676
Portable	&8A	Power down or up	4-197
PostInit	&73	All modules have been initialised	1-264
PreModeChange	&4D	Mode change	1-618
PreReset	&45	Pre-reset	4-134
Print	&41	For internal use only	3-598
ProtocolDying	&83	Part of the AUN Driver Control Interface	2-644
ReAllocatePorts	&48	Econet restarting	2-642
ReleaseFIQ	&0B	Release FIQ	1-135
Reset	&27	Post-Reset	3-69
ResourceFSDying	&5A	ResourceFS is killed	2-412
ResourceFSStarted	&59	The file structure inside ResourceFS has changed	2-411
ResourceFSStarting	&60	ResourceFS module is reloaded or reinitialised	2-413
ScreenBlanked	&7A	Screen blanked by screen blunker	4-108
ScreenRestored	&7B	Screen restored by screen blunker	4-109
ShutDown	&7E	Switcher shutting down	3-81
ShutdownComplete	&80	Shutdown completed	3-82
Sound	&54	Parts of the Sound system are starting or dying	4-17
StartedFiler	&4C	Request to filing-system-specific desktop filers to set taskHandle variable to zero	2-492
StartedWimp	&4A	Request to task modules to set taskHandle variable to zero	3-72
StartFiler	&4B	Request to filing-system-specific desktop filers to start up	2-490
StartUpFS	&12	Start up filing system	2-22

Name	No	Meaning	Page
StartWimp	&49	Start up any resident module tasks using Wimp_StartTask	3-70
SwitchingOutputToSprite	&72	Output switched to sprite, mask or screen	1-760
SyntaxError	&8C	Syntax error translation	1-265
TerritoryManagerLoaded	&64	Tell territory modules to register themselves.	3-790
TerritoryStarted	&75	New territory starting	3-791
UKByte	&07	Unknown OS_Byte	1-257
UKCommand	&04	Unknown command	1-255
UKConfig	&28	Unknown *Configure	1-260
UKStatus	&29	Unknown *Status	1-261
UKWord	&08	Unknown OS_Word	1-258
ValidateAddress	&6D	OS_ValidateAddress has been called with an unrecognised area	1-362
WimpCloseDown	&53	Notification that the Window Manager is about to close down a task	3-75
WimpPalette	&5D	Palette change	3-79
WimpRegisterFilters	&86	Allows the Filter Manager to install filters with the Window Manager	3-77
WimpReportError	&57	Request to suspend trapping of VDU output so an error can be displayed	3-77
WimpSaveDesktop	&5C	Save some state to a desktop boot file	3-78
WimpSpritesMoved	&85	Wimp sprite pools have moved	3-77



# Numeric index of SWIs

## Operating system SWIs

### OS SWIs (Kernel and FileSwitch)

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&02	OS_Write0	1-504
&03	OS_NewLine	1-505
&04	OS_ReadC	1-852
&05	OS_CLI	1-929
&06	OS_BytE	1-54, Index-13
&07	OS_Word	1-61, Index-17
&08	OS_File	2-30
&09	OS_Args	2-46
&0A	OS_BGet	2-60
&0B	OS_BPut	2-62
&0C	OS_GPB	2-63
&0D	OS_Find	2-72
&0E	OS_ReadLine	1-910
&0F	OS_Control	1-296
&10	OS_GetEnv	1-298
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&17	OS_BreakPt	1-305
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&1A	OS_UpdateMEMC	1-366
&1B	OS_SetCallBack	1-308
&1C	OS_Mouse	1-699
&1D	OS_Heap	1-368, 5a-41
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&22	OS_GenerateEvent	1-152
&23	OS_ReadVarVal	1-309, 5a-661
&24	OS_SetVarVal	1-311
&25	OS_GSInit	1-450
&26	OS_GSRead	1-452
&27	OS_GSTrans	1-454
&28	OS_BinaryToDecimal	1-456
&29	OS_FSControl	2-77, 5a-166, 5a-663
&2A	OS_ChangeDynamicArea	1-377, 5a-40
&2B	OS_GenerateError	1-45
&2C	OS_ReadEscapeState	1-912
&2D	OS_EvaluateExpression	1-457
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&2F	OS_ReadPalette	1-701
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&31	OS_ReadVduVariables	1-703
&32	OS_ReadPoint	1-707
&33	OS_UpCall	1-177
&34	OS_CallAVector	1-70
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&4A	OS_ReadRAMFsLimits	1-382
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&5D	OS_PrintChar	1-521
&5E	OS_ChangeRedirection	1-931
&5F	OS_RemoveCallBack	1-322
&60	OS_FindMemMapEntries	1-390
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&68	OS_Memory	5a-60
&69	OS_ClaimProcessorVector	5a-28
&6A	OS_Reset	5a-162
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&C0	OS_ConvertStandardDateAndTime	1-435
&C1	OS_ConvertDateAndTime	1-437
&D0	OS_ConvertHex1	1-469
&D1	OS_ConvertHex2	1-469
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&D8	OS_ConvertCardinal4	1-469
&D9	OS_ConvertInteger1	1-469
&DA	OS_ConvertInteger2	1-469
&DB	OS_ConvertInteger3	1-469
&DC	OS_ConvertInteger4	1-469
&DD	OS_ConvertBinary1	1-469
&DE	OS_ConvertBinary2	1-469
&DF	OS_ConvertBinary3	1-469
&E0	OS_ConvertBinary4	1-469
&E1	OS_ConvertSpacedCardinal1	1-469
&E2	OS_ConvertSpacedCardinal2	1-469
&E3	OS_ConvertSpacedCardinal3	1-469
&E4	OS_ConvertSpacedCardinal4	1-469
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## System Extension SWIs

### Econet SWIs

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&40004	Econet_WaitForReception	2-654
&40005	Econet_EnumerateReceive	2-656
&40006	Econet_StartTransmit	2-657
&40007	Econet_PollTransmit	2-659
&40008	Econet_AbandonTransmit	2-660
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&4000A	Econet_ReadLocalStationAndNet	2-663
&4000B	Econet_ConvertStatusToString	2-664
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&40010	Econet_PrintBanner	2-673
&40011	Econet_ReadTransportType	2-674
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&40014	Econet_DeAllocatePort	2-677
&40015	Econet_ClaimPort	2-678
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OS_ReadPalette	&2F	1-701
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Parallel_Op	&42EC1	2-480

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PDriver_SetInfo	&80141	3-606

## **PDumper (printer dumper) SWIs**

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## **PDumper (printer dumper) SWIs**

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