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# What's new in Virtel

*Release 4.61*

**Syspertec Communications**

**Sep 29, 2023**



## CONTENTS



The following newsletter summarizes the new features and maintenance updates that can be found in Virtel Release 4.61 @ update level 6023.



## INSTALLATION CHANGES

### 5900 VIRTERM/Samplib changes

- SAMPLIB TCT members: Changed BUFSIZE from 20000 to 32000

### 5921 Correct Version number

- Update installation files with correct version number.

### 5944 Wrong DDNAME for SAMPTRSF in VSE installation

- For VSE the DDNAME for the SAMPTRSF file is SAMPTRF

### 5950 ARBOLOAD JCL OPTION Section

- The ARBOLOAD JCL has a new OPTION section for including transactions CLI-03CO and W2H-03CO

### 5976 Samplib changes

- TCT Remove redundant VSAM options for US,FR and 01
- ABROLOAD Separate out CLI-31U and CLI-31C
- VIR4INST Update level no.

### 5974 ARBOLOAD Sample

- Timeout value reduced





## MIGRATION CONSIDERATIONS

### 2.1 V4.61

#### End of support for COMPATIBILITY mode

The “COMPATIBILITY” mode for w2hparm, that was introduced in version 4.54 to provide seamless migration of V4.53 w2hparm to V4.54. w2hparm is no longer supported in V4.61. It is recommended to switch to “Option” mode before migrating to V4.61.

#### Version support

Versions of Virtel older than V4.59 are no longer supported. It is recommended to migrate to V4.59 or higher.

#### ARBO changes

- There have been no changes to the ARBO which would require migration from V4.60 or V4.59. Customers who are migrating from older releases should review the “What’s new in Virtel V4.XX” newsletters to determine applicable migration actions for new distributed features. Depending on requirements not all actions may be applicable. These newsletters are available online at <https://virtel.readthedocs.io/en/latest/>
- LINE enhancement. LOCADDR2 and PARTNER2 keywords are deprecated in V4.61 VIRCONF. LOCADDR and PARTNER fields have been expanded to accommodate IPV6 addresses and DNS values upto 52 characters. ARBO files from V4.59 and V4.60 will still be usable with V4.61 with migration. It is recommended that you migrate you ARBO to V4.61 by unloading in V4.59 or V4.60 to create a SYSIN deck for input to V4.61 VIRCONF LOAD. Any LOCADDR2 or PARTNER2 fields will have to be removed and the extended field data moved to the corresponding LOCADDR and PARTNER fields prior to loading with V4.61 VIRCONF.



## FIXES, CHANGES AND NEW FEATURES

### 3.1 Presentation

#### 5887 APL support for Omegamon

- Improved Omegamon 3270 Enhanced APL support.

#### 5888 minor Javascript updates

- Correct copy and paste implementation.
- Add option of displaying the SYSNAME in the Virtel title bar.
- Improved help panels.

#### 5890 update backspace key to left arrow to settings panel

- Settings panel now supports backspace as left arrow.

#### 5891 Security type 4. Expired password panel correction

- Changes have been made to support an expired password panel in the Security type 4 logic.

#### 5892 Modified delete PF Key description on Virtel Rule List Panel

- Virtel Rule List panel, “Suppress” text replaced by “Delete”

#### 5895 Ctrl+S default logic amended

- Browser copy and paste functionality impacted by Ctrl+S code.

#### 5896 TBT Web Access

- Uppercase attribute corrected

#### 5899 Missing class attribute for color update, cAppMenu documentation updated

- Updates to the cAppMenu feature.

#### 5906 Update ShowFTP parm

- w2hparm corrected to process ShowFTP parameter

#### 5913 Fix Insertion mode of Ctrl+V without Paste

- Fixed insertion problem when using Ctrl+V without the “Map Ctrl+V to Paste by Typing” option activated.

#### 5917 Correct “Paste Continue” menu in IE11

- Regressed code fixed.

#### 5920 Colors on the grey background modification

- Correct CSS file.

### **5923 Unicode conversion of specific character**

- Curly quotes converted to straight quote

### **5924 Mouse wheel enhancement**

- Initialisation process modified to avoid error messages - “language xx is not processed”.

### **5936 Samsung Tablet support**

- Add support for Samsung tablet and customization of keys.

### **5946 Make scroll up/down mouse actions customizable**

- Mouse actions can be controlled (ON/OFF) or associated to PF7/PF8 keys through new options in the settings panel.

### **5949 Remove the “VIRTEL 4.61 Web Access” text from the “401 unauthorized” screen**

- Security enhancement to define, through then new TCT option VWAVERS=, the text that appears in HTTP 40x templates.

### **5954 Updates to WA key mapping**

- Improved calling by passing it a JSON object or a string.
- Compression of code vir3270.js

### **5959/66 Adding of a favicon.ico to .htm pages**

- Avoid the console error message on browsers searching for favicon.ico. Add “pathToFavicon” to oCustom variable.

### **5960/66 Enhancement to cAppMenu**

- Updated cAppMenu templates

### **5961 Support for IBM Debugger**

- Correctly process BIND protocols when in session with IBM Debugger.

### **5965/8 TBT Web Access**

- Support input fields with FER attribute.

### **5972 IPAD Support**

- Improved Toolbar / Enter key usage.

### **5973 X-UserSignonCode may fail upload**

- Prevent upload failures if code contains a valid “X-UserSignonCode: ” header

### **5985 Update TCT command**

- Add LOCK and LPKALIVE values

### **5986 Update messages VIRC121E/VIRHT54E**

- Put CALLER in front of messages VIRC121E and VIRHT54E

### **5991/5996 New Search Facility**

- 3270 Administration panels now have a Search Facility

### **5995 Correct Cursor position**

- Correct cursor position in 3270 Administration panels

**5998 Correct terminal status display**

- Invalid display in terminal status screen

**6002/3 Correct Line display**

- Correct PF4 terminal list in ADMIN 3270 Line display

**6009 Correct messages at Virtel shutdown**

- VIRSV message is confusing error messages at Virtel shutdown

**6012 Message Update**

- Correct message VIR0072I

**6016 Correct 3270 transaction display**

- Values are mis-aligned in French display.

**6017 VIRCONF Updates**

- Add LOCK= keyword to VIRCONF Entry Point

**6022 Correct TCT display**

- VSAMTYP not correct formatted.

## 3.2 Base Components

### 5893 VIRPLEX startup corrected

- Modification to support IPV6 protocol.

### 5894 VIRPLEX error after long poll response

- Avoid “Storage Exhaustion” due to inadvertent long poll storage reuse. Possible AbendS0C4.

### 5897 High CPU when using USERPARM and VSAMTYPE=READONLY

- Correct High CPU issue when using USERPARM with VIRHTML defined as READONLY

### 5898 VIRIPA9I INITIALISATION FOR VIRTELXM (9-XMPASS)

- Message VIRIPA9I corrected to show correct Virtel version number.

### 5900 Updates to VIRTERM

- Increase BUFSIZE default value from 8192 to 32000. MVS only.

### 5901 Correct ABENDS0C4 in MEMDISPLAY command

- Default DSASIZE defaults to 1MB, which is too small. Message VIR0086E issued.

### 5903 VIRAPI error in 4.59

- VIB deleted, destroying the VIRAPI control block. Corrected.

### 5904 USERPARM 100% CPU at Virtel startup

- Logic updated to correctly handle VSAM key location searches.

### 5905 Update IND\$FILE Codepage limitation

- Codepage logic corrected. Code regressed following fix.

### 5908 Improve support for graphics escape characters

- Correct Graphic characters processing. Characters were being replaced base character set.

### 5909 Passphrase fix for NOMIXEDCASE environments

- Uppercase conversion was being performed on passphrase. This is incorrect.

### 5910/5893 VIRPLEX STARTUP INCORRECT IN VIRTEL 4.61

- Correct Virplex startup processing.

### 5912 allow setting minimum PASSPHRASE length

- Avoid ICH409I 283-024 Abend. Password and Passphrase lengths can be defined in TCT to set lengths for Passphrase.

### 5915 Support for dynamic SNAP message table

- New feature. Messages can now be dynamically added to the SNAPMSG table. Maximum of 10 messages.

### 5916/25/30/38/42/84 LOCK= terminal support

- LOCK= keyword in TCT for HTML terminals. Force users to re-enter password after LOCK period has expired.
- Support ESC key as DISCONNECT
- CANCEL bug when using SECU=1

**5922 Correct SILENCE(YES/NO) in VIRTERM macro**

- Correct SILENCE= keyword logic in VIRTERM macro.

**5927 Support unsolicited BINDS**

- Support for applications which use unsolicited BIND in session setup. For example IBM Debugger.

**5943 Fix S0C1 bug after VIR0010 DETACH**

- Registers in an inactive terminal were reloaded from the TIOA following a call of a DETACH function in VIR0010. This resulted in a S0C1 Abend.

**5945 Abend ASRA VIRHTTP**

- The abend is caused by Virtel not correctly processing a GET request that contains spaces in the URL.

**5947 New TCT keyword LPKALIVE= LONG POLL KEEP ALIVE**

- The Long poll timeout can now be set through a TCT parameter.

**5948 Enhancement to the RULE =HTFORWD IS or IS NOT option.**

- Rule now supports a list of proxy server through the HTFORWD option.

**5957 VirtelUserSignon= or USER-SIGNON-CODE data removed**

- Prior to this change user name and password were included in the (encrypted) VirtelUserSignon code.

**5958 Fix bug in VIRSV REQUEST**

- Error message VIRS125E MQSAEH34 VIRSV REQUEST ERROR - R15 : 0000080C. Number of NBCELL increased from 6 to 12.

**5963/82 VSE abend on /READ on CLOSED session**

- Correct bug in VIR0010

**5964/67/70/80 VIRCONF Updates**

- Remove LOCADDR2 and PARTNER2 support. VIRCONF and ARBO fields now support larger fields for LOCADDR and PARTNER values in the LINE record.

**5969 New Security type 5**

- Implements a new Security type 5 for transaction which allows a user signon to bypass the security manager (e.g. RACF) if already connected with a valid VirtelUserSignon code.

**5978 RTM Update**

- Correct Response Time Monitor if time out occurs. Avoid Screen locked

**5979 VIRCONF Update**

- Add ESTAE to VIRCONF to avoid bring down Virtel should VIRCONF abend in UNLOAD command.

**5981 Performance Issue**

- Possible Bad performance for VTAM applications

**5988 404 return code**

- Correct Long Poll issue. A 404 return code is presented after a 304 LP0

**5990 403 return code**

- Correct Signon Code. A 403 can occur if Signon box is cancelled

**PF=DISCONNECT ignored**

- PF=DISCONNECT is ignored following a conflicting intermediary requests.

**6000 VSE CSI TCP/IP stack error**

- Provide support for Stack error x002e

**6001 Menu locked**

- if a menu is locked out, the User Signon Code should not work

**6004 Implement Auto startup feature**

- Implement a startup auto message function and add new support to message table.

**6005 USS table processing**

- Default USSTAB is incorrect.

**6006 STATS=SMF**

- Correct B37 processing for STATS=SMF

**6007 Chrome Browser Error**

- Correct a change in the implementation of (new Date).toLocaleTimeString() in Chrome

**6008 LastPage Error**

- No LastPage displayed after LOCK and TSO Timeout

**6010 Edge Browser Error**

- Avoid blocking Virtel with EDGE in IE11 compatibility mode

**6013 Virtel Parameters**

- Conflict between LPKALIVE= and LOCK= parameters

**6015 Virtel CPU loop**

- A CPU loop can occur following Telnet ping

**6023 Virtel ABEND S0C4**

- VirtelUserSignon= can cause a SC4 due to VUSC/cookie conflict



## 3.3 Scenario Language

### 5918 Scenario Discard Flag is reset if application issues CLSDST,PASS

- Correct VTAM CLSDST,PASS processing in scenario code.

### 5919 Abend after setting DBCS from a scenario

- Correct Abend in scenario when using DBCS.

### 5931 DECLARE\$ bug

- Bug in DECLARE\$ when length=79 destroys buffer. Screen garbled.

### 5999/6019 Updates to MAP\$

- Support for MAP\$ FROM-VARIABLE,JSON,VAR=

## 3.4 Other Enhancements

### 5907 UPLOAD fails

- Boundary processing corrected for VSR.

### 5937 AIEV Abend

- Remove AEIV Abend when ARBO is updated at a higher Vrtel release. Now reported as a LENGTH ERROR.

### 5940 LOCADDR updates

- When a DNS name is used as a LOCADDR= address it was capitalized and put in quotes. This has been removed.

### 5941 AXIOS UPLOAD corruption

- Data was corrupted after upload from AXIOS.

### 5956/62 AXIOS UPLOAD stalls

- Processes of chunked data improved to avoid stalling during upload.

### 5971 Update SSLSETUP in SAMPLIB

- Correct keysize in sample member

### 5975 Update SMFREXX procedures in SAMPLIB

- SMFPRINT and SMFPRNTL updated
- REXX procedures SMFREXXP and SMFREXXL updated

### 5997 SAMPLIB Update

- Update ARBOLOAD Samplib Member. New resources added to allow password change.

### 6021 SAMPLIB Update

- Update SSLSETUP with new CipherSuites

## NEW FEATURES

### 4.1 Implement Auto startup feature and command members

When starting up VIRTEL, it will attempt to open the STARTUP member of the new PDS File VIRCNTL. This is a new optional DDNAME which contains message control members. The STARTUP member will contain list of Virtel commands that can be issued at Virtel initialisation. For example SILENCE commands. Example of a STARTUP member; -

```
* ADD SILENCE MESSAGES *
SILENCE=VIR0018I
SILENCE=VIR0012I
* SWITCH SILENCE *
SILENCE
* SET TRACE *
TRACE,L=C-HTTP,ON
* LIST SILENCE MESSAGES *
SILENCE=LIST
* DISPLAY TCT *
TCT
* DISPLAY STAT STATUS '
STAT,D
* DISPLAY LOG STATUS
LOG,D
* DISPLAY SNAPMSG TABLE
SNAPMSG,LIST
```

A new modify command has been added to enable execution of a command message member at any time: -

```
F VIRTEL,EXEC=membername.
```

For example

```
F VIRTEL,EXEC=TRCLINES
```

This will execute the commands in the TRCLINES member of the VIRCNTL PDS. The SNAPMSG command also has a new action: -

```
C=membername.
```

This will trigger a command message member being executed whenever a message is trapped by SNAPMSG. An example of using a command member with the SNAPMSG command is: -

```
F VIRTTEL, SNAPMSG=VIRT905I, , C=LINES
```

This command will cause the execution of the commands in the LINES member of the VIRCNTL PDS whenever the VIRT905I message is trapped.

## 4.2 Migration Requirements: -

Optional DDNAME to be added to the z/OS VIRTTEL procedure : -

```
NEW DDNAME card :    VIRCNTL
Attributes      :    PDS, LRECL=80, RECFM=FB, BLKSIZE=3120, SPACE=(TRK,(5,5,
↪10))
```

## UPDATES AND MAINTENANCE

A full list of maintenance updates can be found in Appendix A.



## APPENDIX A

### Maintenance list

- 5887 APL support for Omegamon
- 5888 Minor Javascript updates
- 5890 update backspace key to left arrow to settings panel.
- 5891 expired password panel correction in security 4
- 5892 #2031 Translation of delete PF Key description on Virtel Rule List Panel
- 5893 VIRPLEX startup incorrect in Virtel 4.61
- 5894 VIRPLEX error after longpoll response
- 5895 Ctrl+S default behavior prevented Enhancement, Copy/Paste ending by empty
- 5896 TBT Web Access - Uppercase attribute correction
- 5897 High CPU when using USERPARM and VSAMTYPE=READONLY; VIRHTML should not be
- 5898 VIRIPA9I INITIALISATION FOR VIRTELXM (9-XMPASS) - CHANGE THE VIRTEL VERSI
- 5899 Missing class attribute for color update, cAppMenu documentation update
- 5900 Updates to VIRTERM
- 5901 Correct ABENDS0C4 in MEMDISPLAY command
- 5903 VIRAPI error in 4.59
- 5904 USERPARM 100% CPU at Virtel startup
- 5905 Update IND\$FILE Codepage limitation
- 5906 Update showFtp parm
- 5907 UPLOAD fails
- 5908 Improve support for graphics escape characters
- 5909 Passphrase fix for NOMIXEDCASE environments
- 5910 PTF for update 5893
- 5910/5893 VIRPLEX STARTUP INCORRECT IN VIRTEL 4.61
- 5911 Delivery VIRTERM MACLIB Xmit format
- 5912 allow setting minimum PASSPHRASE length
- 5913 Fix Insertion mode of Ctrl+V without Paste by typing activated

- 5914 Correct VIRTERM macro delivery.
- 5915 Support for dynamic SNAP message table
- 5916 LOCK= terminal support
- 5917 Correct “Paste Continue” menu in IE11 regression, dfhmdf.txt replacement
- 5918 Scenario Discard Flag is reset if application issues CLOSEDESTPASS
- 5919 Abend after setting DBCS from a scenario
- 5920 Colors on the grey background modification
- 5921 Correct version number
- 5922 Correct SILENCE(YES/NO) in VIRTERM macro
- 5923 Unicode conversion of specific character (curly quotes to straight quote)
- 5924 Mouse wheel enhancement, Initialization process modified to avoid message
- 5925 ESC acts as DISCONNECT in LOCK Support
- 5926 Correct messages in SNAPMSG display
- 5927 Allow unsolicited BINDS
- 5929 License statement corrected
- 5931 DECLARE\$ bug
- 5932 Scenario assembly errors
- 5933 Remove Compatibility support
- 5934 Update LOCK= processing
- 5935 WaitScreen instruction in Javascript
- 5936 Samsung tablet support
- 5937 Prevent AEIV abends
- 5938 LOCK= and CANCEL support
- 5940 Correct LOCADDR processing in ARBO LOAD/UNLOAD
- 5941 Correct UPLOAD bug for AXIOS
- 5942 LOCK= various complements
- 5943 protect against execution after VIR0010 DETACH
- 5944 Wrong DDNAME SAMPTRSF for DOC-DIR in VSE installation
- 5945 Abend ASRA VIRHTTP +45E2 when receiving invalid URL
- 5946 Make scroll up/down mouse actions customizable
- 5947 LPKALIVE= LONG POLL KEEP ALIVE
- 5948 RULE allow =HTFORWD IS or IS NOT sample rule
- 5949 Remove the “VIRTEL 4.61 Web Access” statement from the “401 unauthorized” screen
- 5950 ARBOLOAD. Update descriptions for transaction CLI-03CO and W2H-03CO
- 5954 Adjustment for WA key mapping : Correction dto save shortcut when creating macro.
- 5955 CA-TS user specific PTF5955



- 5956 AXIOS chunked upload may stall
- 5957 VirtelUserSignon= or USER-SIGNON-CODE changed to no longer contain user info
- 5958 VIRS125E MQSAEH34 VIRSV REQUEST ERROR - R15 : 0000080C
- 5959 Update of the current version : Adding of a favicon.ico in the pages .htm - Mise à jour de la version courante : Ajout d'un lien favicon.ico dans certaines pages .htm
- 5960 cAppMenu Enhancements. Adding option for Copy/Paste Append mode.
- 5961 Allow Unsolicited BIND from an application like IBM Debugger
- 5962 Upload file fails with header/footer
- 5963 VSE abend on /READ on CLOSED session
- 5964 Support new ARBO Line format in VIRCONF. LOCADDR2/PARTNER2 deprecated.
- 5965 Support for input fields with FER attribute (TBT WebAccess) and minor change in WEB2HOST.htmtemplate (Virtel WebAccess )
- 5966 Option pathToFavicon enhancement and minor correction to cAppMenu
- 5967 Improvement on UPDT5964
- 5968 Improvement on UPDT5965
- 5969 VirtelUserSignon and security 5
- 5970 Correct VIR0046 following 5964. Abend S0C1 when creating a Line Record
- 5971 Correct Keysize in SSLSETUP job
- 5972 JQuery Update, IPAD version : landscape mode correction to make the ENTER toolbar
- 5973 X-UserSignonCode may conflict with capabilities
- 5974 Reduce default timeout value in sample ARBOLOAD
- 5975 Update SMF REXX procedures
- 5976 SAMPLIB Updates
- 5977 display modified/distorted after LOCK=
- 5978 : Response Time Monitor update, Screen-Lock parameter action if time out
- 5978 correction for VSE assemblies
- 5979 Add ESTAE to VIRCONF
- 5980 Update support for PARTNER/LOCADDR fields when greater than 22 characters.
- 5981 Possible Bad performance for a VTAM application
- 5982 VSE abend after /READ completes on CLOSED session
- 5983 Various tweaks to Virtel installation for 4.61
- 5984 no LOCK if unsigned
- 5985 TCT command: add LOCK and LPKALIVE
- 5986 put CALLER in front of messages VIRC121E and VIRHT54E
- 5987 Fix various 4.61 package generation issues
- 5988 404 return code after 304 LP0
- 5989 Fix RC4 in CLIENTM.JCL Virtel 4.61

- 5990 403 on cancel of signon box
- 5991 Search Facility on 3270 Admin Panels
- 5992 Remove ARBO V2 check at startup.
- 5993 PF=DISCONNECT ignored after conflicting intermediary requests
- 5994 RC4 in compilation of ADMINVWM
- 5995 Change Initial Cursor position for Admin 3270 panels
- 5996 Add Search to Transaction List Display
- 5997 Update ARBOLOAD Samplib Member
- 5998 Invalid display in terminal status screen
- 5999 Support for MAP\$ FROM-VARIABLE,JSON,VAR=
- 6000 VSE CSI TCP/IP stack error x002e not supported
- 6001 if menu is locked, User Signon Code should not work
- 6002 Correct PF4 terminal list in ADMIN 3270 Line display
- 6003 Correct cursor position on DELETE in ADMIN 3270 screens
- 6004 Implement startup auto message function
- 6005 Correct USSVIRT USS table
- 6006 B37 on VIRSTAT FOR STATS=SMF
- 6007 Correct a change in the implementation of (new Date).toLocaleTimeString() in Chrome
- 6008 No LastPage after LOCK and TSO Timeout
- 6009 VIRSV confusing error messages at Virtel shutdown
- 6010 Avoid the Update 6007 blocking Virtel with EDGE in IE11 compatibility mode
- 6011 Fix more 4.61 installation issues
- 6012 Correct message VIR0072I
- 6013 Conflict between LPKALIVE= and LOCK= parameters
- 6014 Screenlock and its consequences on the macros sources code + a cleanup between w2h and w2h/sources + Compression scripts modifications
- 6015 Virtel CPU loop can occur following Telnet ping
- 6016 Correct 3270 transaction display.
- 6017 Add LOCK= to VIRCONF
- 6018 Modification of the ADMINVWM scenario to reflect the SECU 5 already present in the 3270 Administration Page
- 6019 SCENARIO containing MAP\$ no longer working
- 6020 identical to 5994 RC4 in compilation of ADMINVWM
- 6021 Update SSLSETUP with new CipherSuites
- 6022 Correct TCT display. VSAMTYP not set
- 6023 VirtelUserSignon= possible s0C4 due to VUSC / cookie conflict