

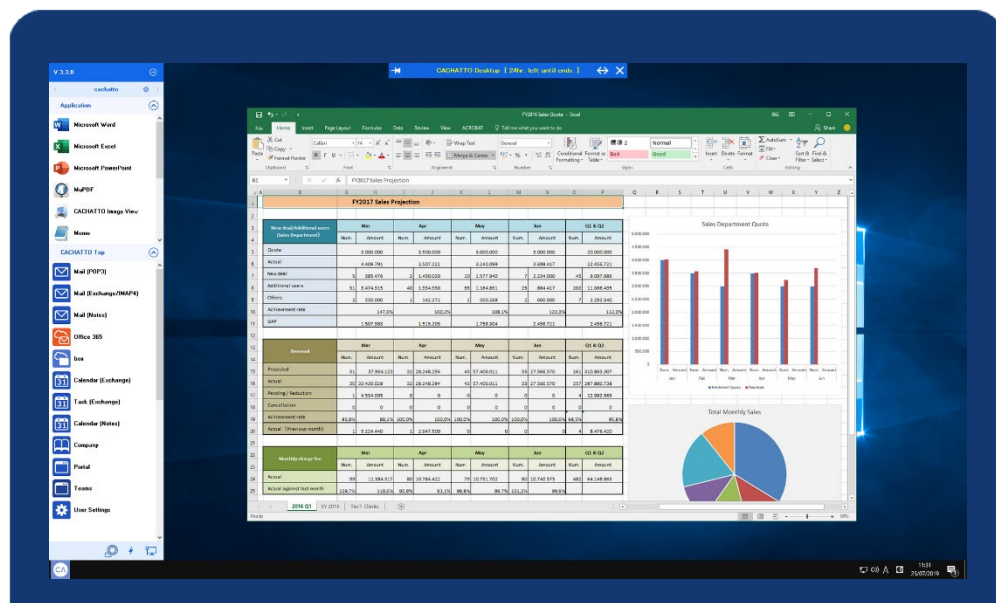
For Windows/Mac

Secure access from both '*managed*' PCs and '*unmanaged*' PCs

CACHATTO® Desktop

Product Overview

Virtual workspace solution that generates a securely isolated sandbox environment in the local PC



Ver. June of 2019

*The screen images in this document are for Windows. The displays (or UIs) differ from those of the Mac version.

Do you have issues like the following?

Issue 1

Want to make more use of an individual's own PCs (**BYOD**) for business use
(Telework, childcare, nursing care leave, etc....)



Issue 2

Want to provide employees with a safe and comfortable mobile environment even **during business trips** with unstable communication (aeroplane, train, public/private network, etc.)



Issue 3

Want to provide safe access to the internal systems/files from **PCs of other companies** such as **outsourcing partners and the affiliated companies**



CACHATTO Desktop solves all these issues!



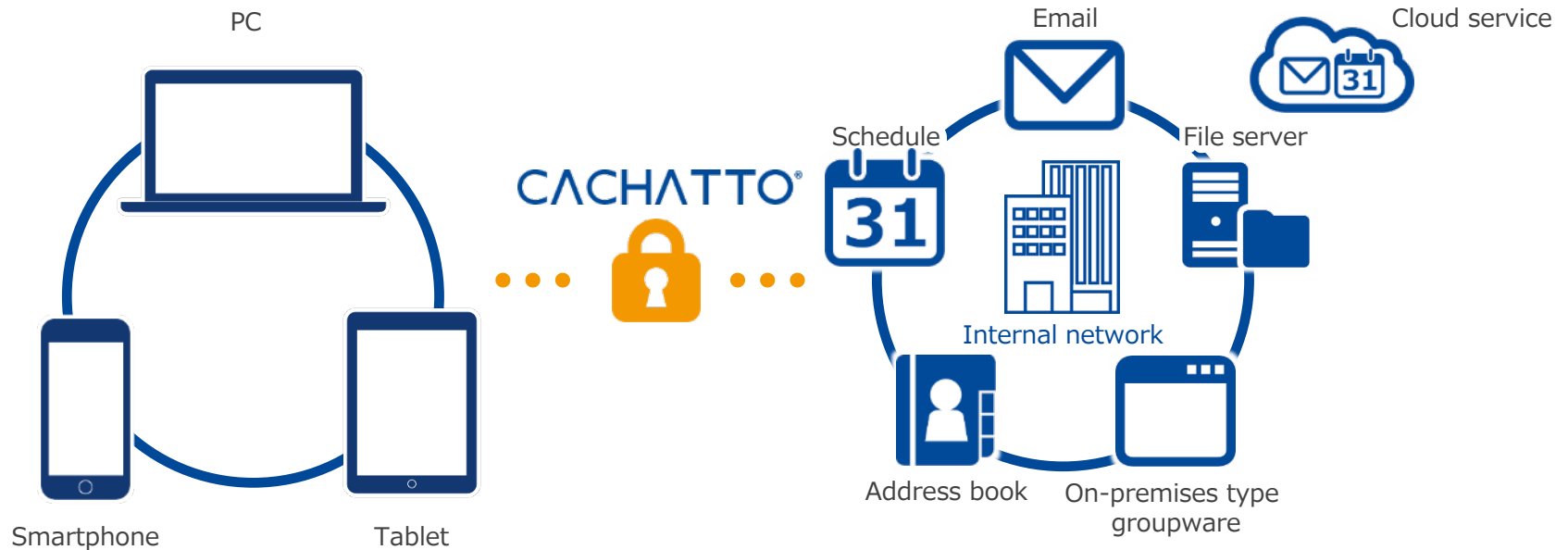
What is CACHATTO Desktop?



What is CACHATTO?

Provides a secure resource access environment

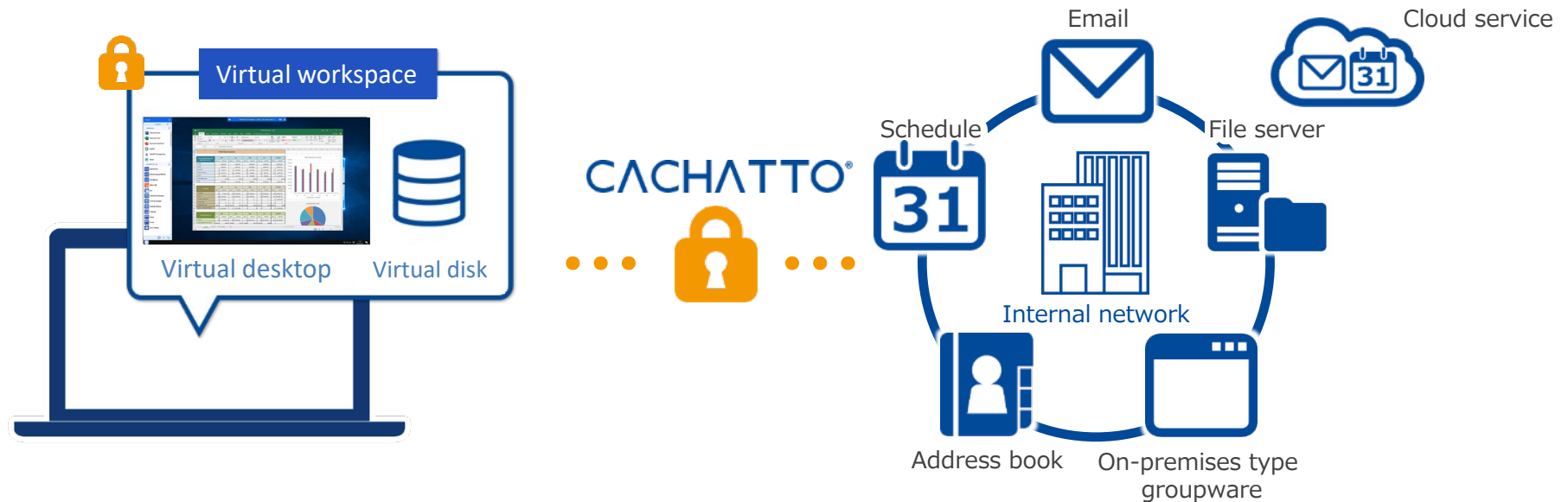
CACHATTO is a platform that provides safe access to business resources, such as cloud-based groupware, internal emails, schedules, web-based groupware, file servers, and address books from PCs, smartphones, and tablets.



What is CACHATTO Desktop?

A secure virtual workspace

A secure virtual workspace (sandbox environment) is temporarily generated in the 'local' region on a client PC, where apps, internal systems, and cloud services can be safely used.



Secure isolated area with no data left in or taken out from it

Access only to permitted minimum resources

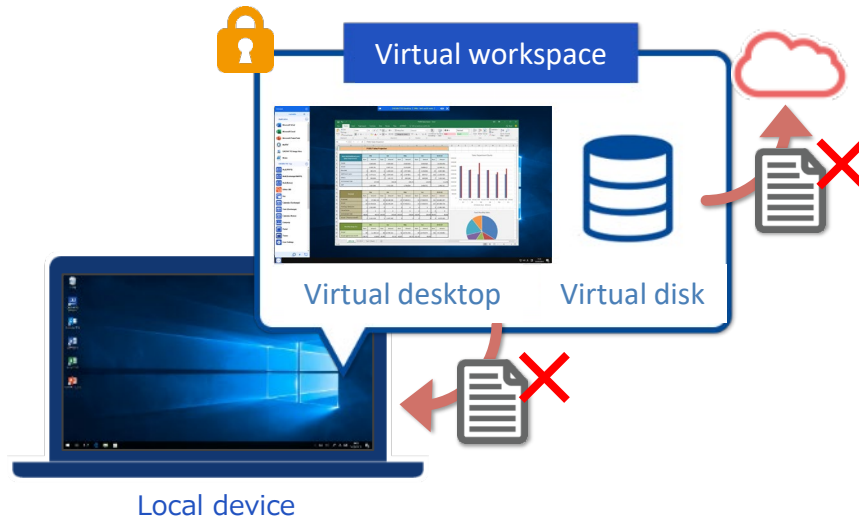
Optimal for making use of PCs outside the scope of management, such as individuals' own PCs and business partners' PCs

CACHATTO Desktop features

Prevents data leakages on end-devices

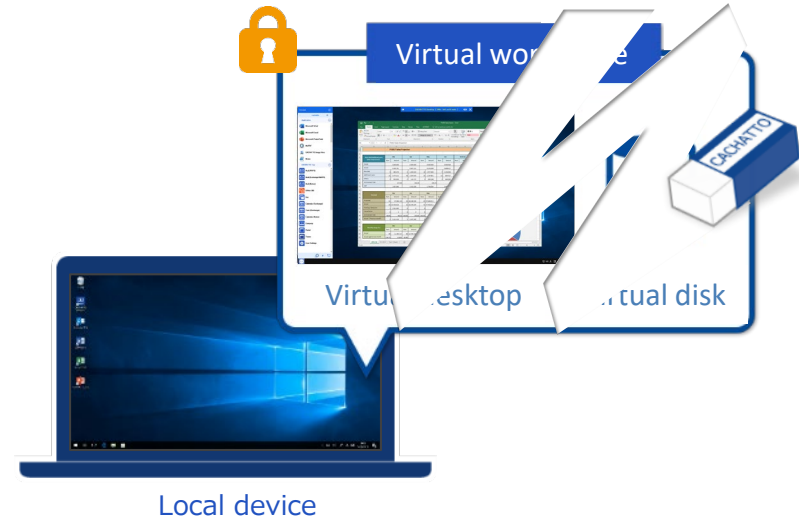
Files in the virtual workspace will be deleted along with the virtual workspace upon log out or when session ends. No data is left on the local PC.

No data can be taken out



- Restriction on taking data out to the local desktop
- Restriction on uploading or saving of data to an unauthorised cloud repository

The virtual workspace is deleted when the work is done



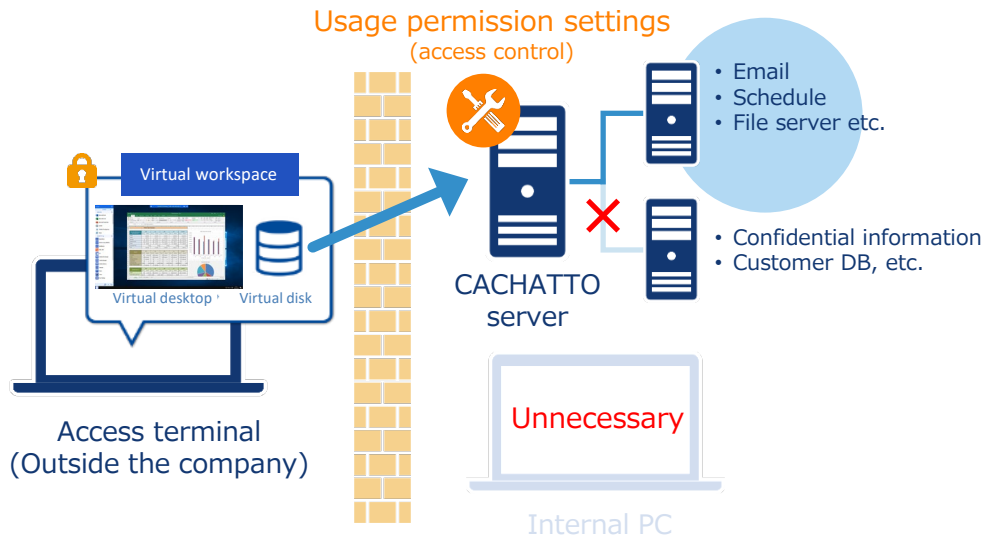
- Files and virtual workspace are deleted together upon terminating CACHATTO Desktop session, leaving no data on the local PC.

CACHATTO Desktop features

Efficient use of resources

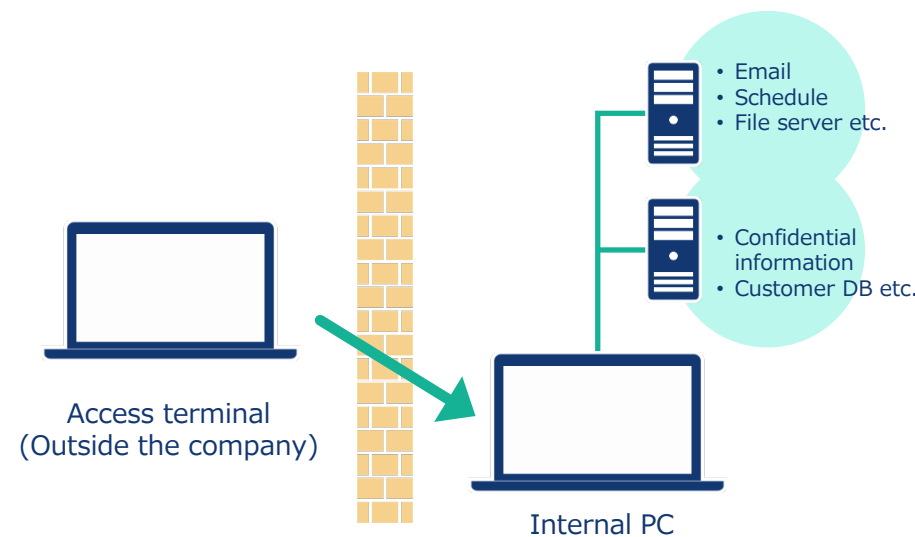
Unlike typical remote desktop services, CACHATTO Desktop is capable of using only the necessary allocated resources. The solution uses the locally installed applications to open files, so there is no need for a PC at an individual desk or a VDI server.

CACHATTO Desktop



- Access is available only on permitted systems.
- Neither a PC at an individual desk nor a VDI server is necessary.

Typical remote desktop service



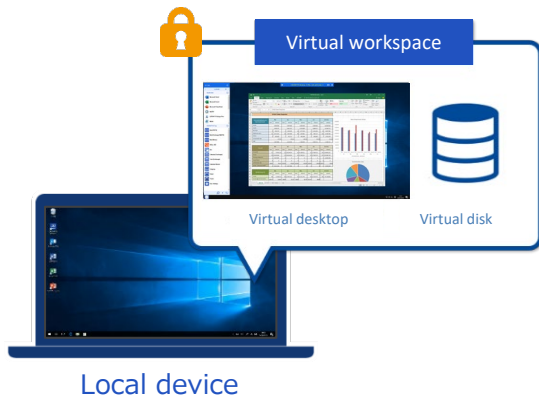
- Access to critical and important confidential information is available anytime and anywhere.
- A physical or virtual PC is necessary for each individual.

CACHATTO Desktop features

Optimal for using '*unmanaged*' PCs that cannot be managed using AD or security software

CACHATTO Desktop is optimal for providing access to 'unmanaged' PCs, such as an individual's own PC and a business partner's PC, that cannot be managed with AD or security software and is also difficult to connect to an intranet via VPN.

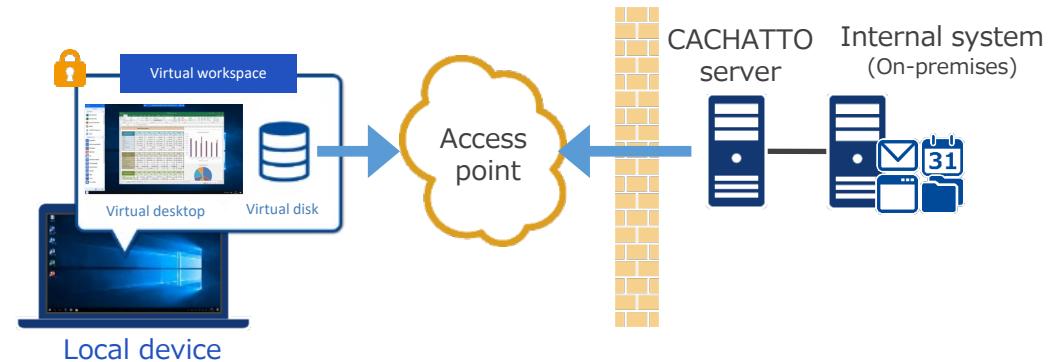
Isolated from the local device



Cannot manage with AD due to no WAN with the affiliated companies.

Do not want to force the outsourcing partner or individual employees to introduce security software into their PCs.

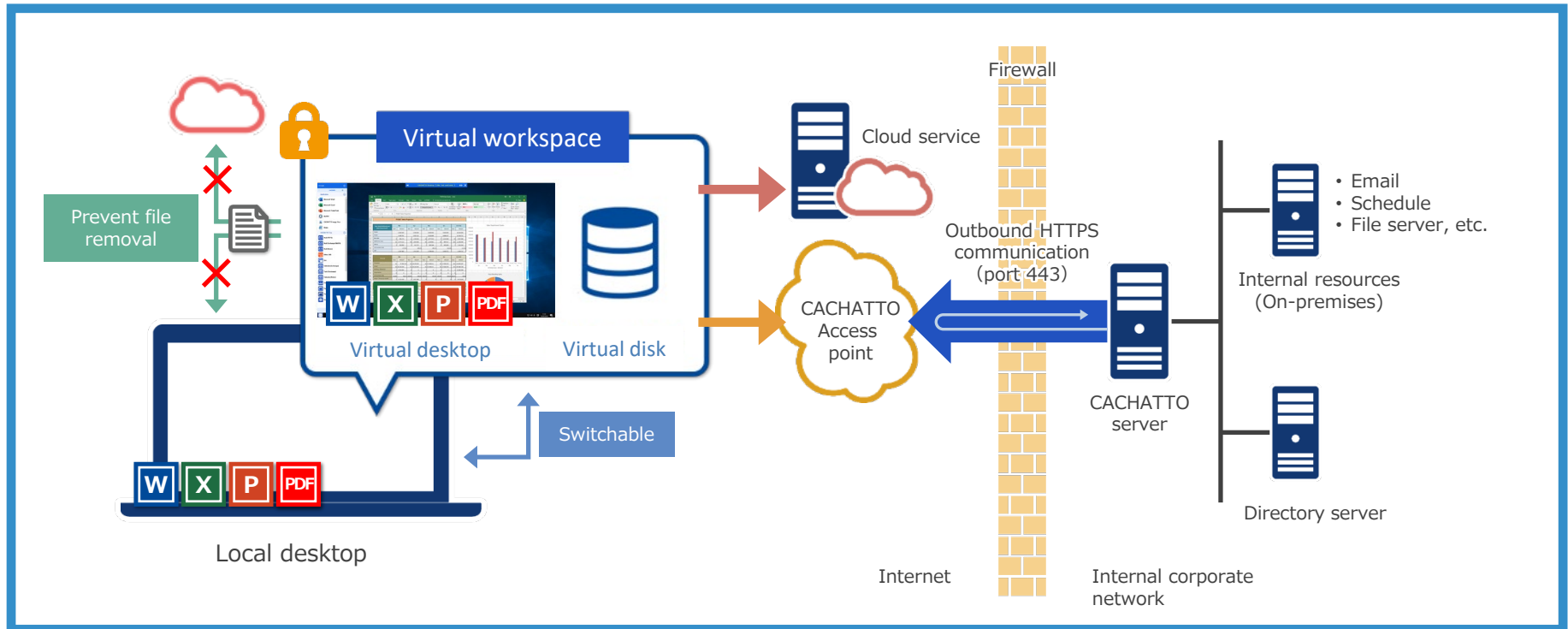
Access terminal isolated from corporate network



Ensuring of security independent of AD or security software

CACHATTO Desktop system configuration

System architecture



(1) Creates a secure **isolated** virtual environment ('virtual desktop' and 'virtual disk *1').

(3) Files can be edited and temporarily saved using local apps, such as **MS Office**.

(2) The use of cloud services and internal business resources is available within a secure virtual workspace.

(4) The virtual workspace is deleted upon logout, **leaving no data** on the terminal.

*1 The administrator can set the place where a virtual disk will be generated to either the memory of the terminal or the hard disk.



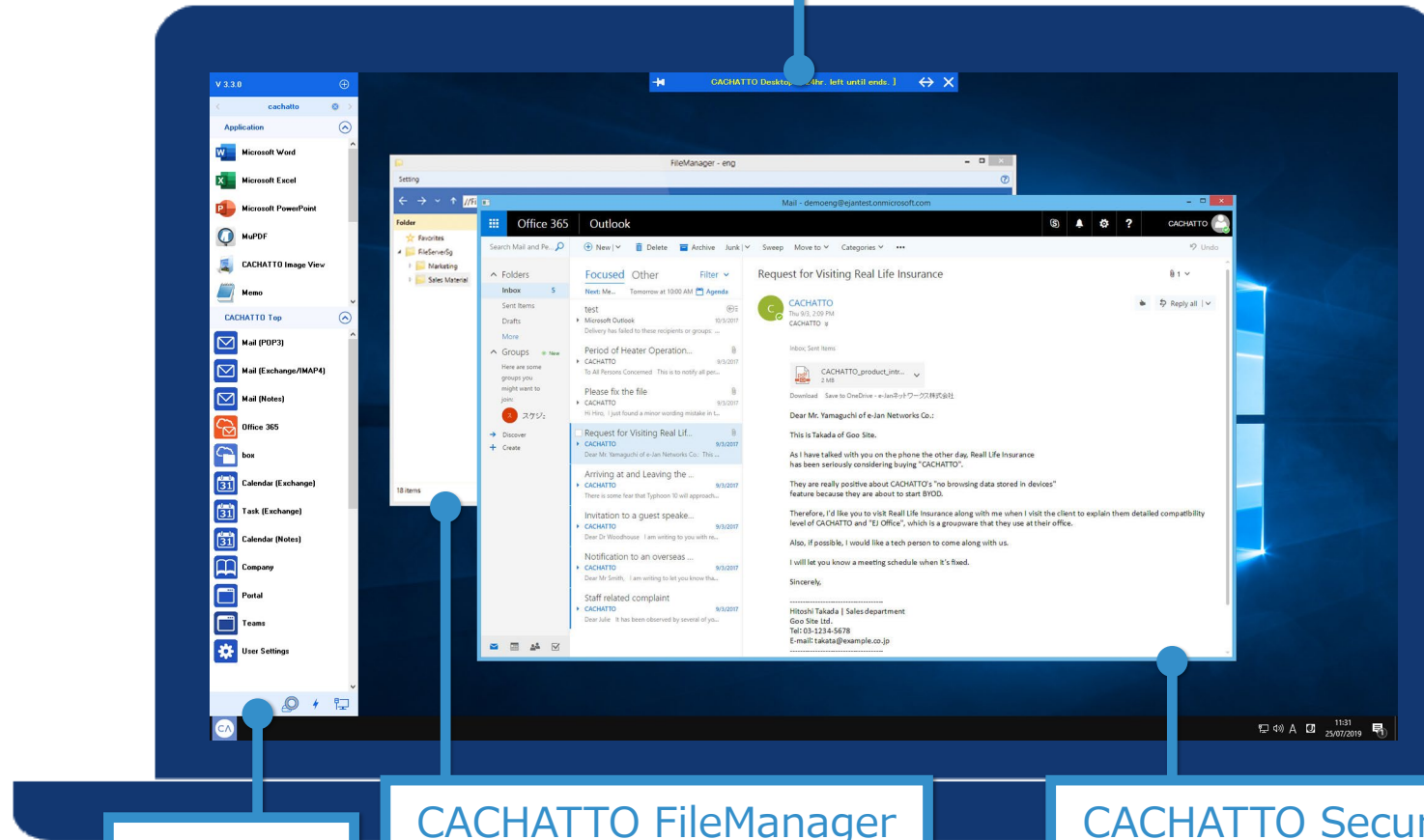
CACHATTO Desktop functionalities



Sample screen

Status bar

Switch to the standard desktop environment;
displays of the available time of use, etc.



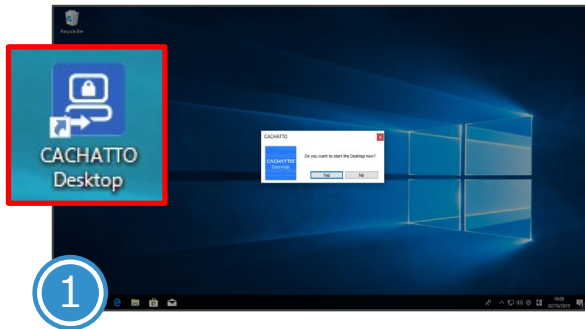
Launcher
Menu apps

CACHATTO FileManager
File server access
Dedicated app

CACHATTO SecureBrowser
Web access
Dedicated app

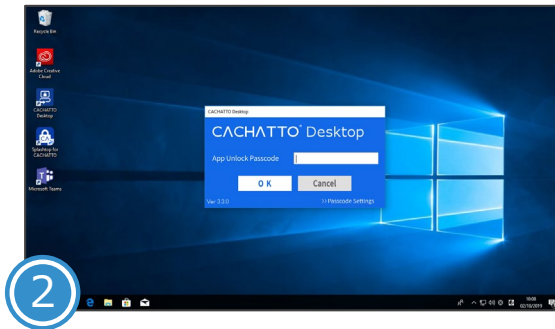
Sample images (web apps)

Start → Access Office 365 → Download a file → Edit the file



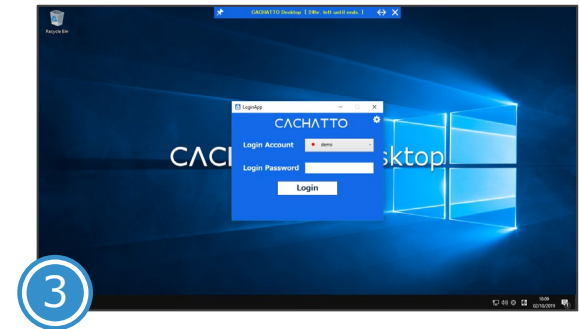
1

Start 'CACHATTO Desktop'.



2

Enter the Applock code to initialise virtual workspace.



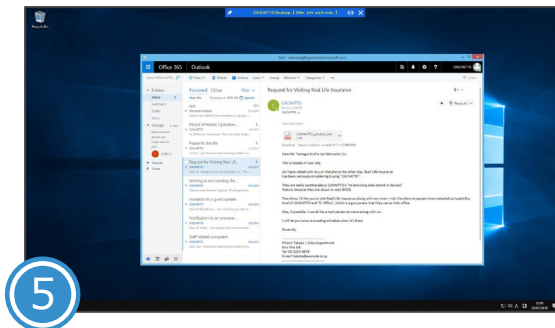
3

Log in to CACHATTO via 'LoginApp', which appears after starting the app.



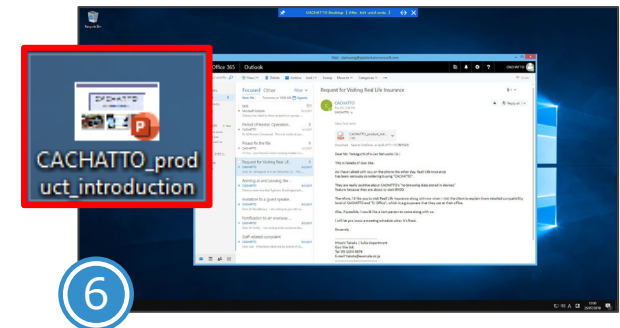
4

The authorized resources set for the user are displayed on 'Launcher'.



5

Select Office 365 on the 'Launcher', and Office 365 will be displayed on the 'CACHATTO SecureBrowser'.



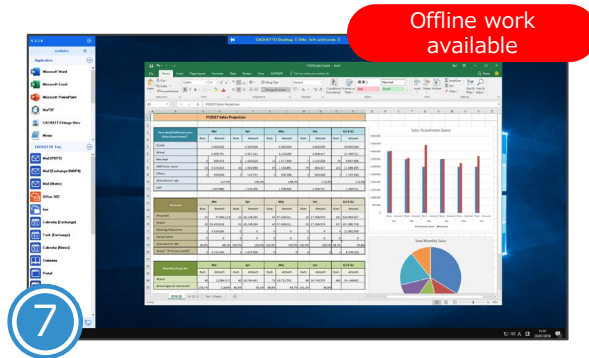
6

Download attachment from Office 365, and save the file within the virtual workspace.

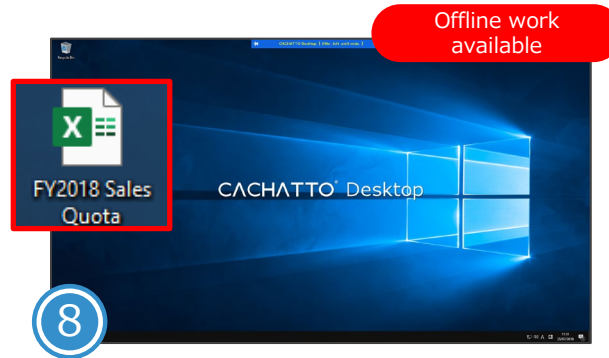
▶ To the next page

Sample images (file server)

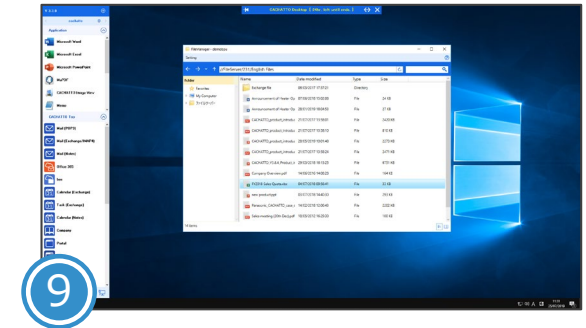
Edit the file → Access the file server → Log out



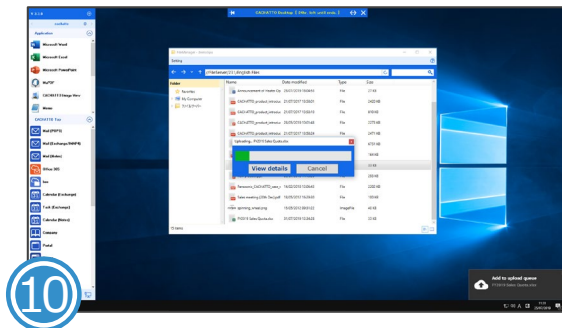
Edit the file using app initially installed on the client terminal.



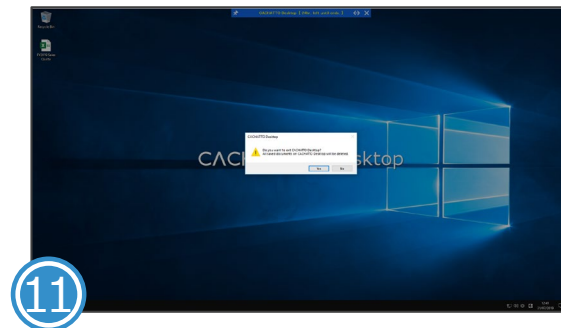
Temporarily save the edited file within the virtual workspace.



Select File Server from 'Launcher', and 'CACHATTO FileManager' launches.



Upload the edited file to the file server through drag & drop.



After everything has been completed, log-off CACHATTO Desktop.



The file will be deleted with the virtual workspace. The system will turn back to the local desktop environment.

Function topics

Seamless access using 'Launcher'

The 'Launcher' stored in the task bar icon displays the local apps available within the virtual workspace and the business resources permitted for the login account.

(1) Local apps*1

Lists the local apps available within the virtual workspace.

(2) CACHATTO Top

Lists the business authorised resources for a specific user account.

Other functions

- Start of LoginApp
- Account switching (when using multiple accounts)
- Log output



*1 The supported apps must be installed in advance on the terminal to be used.

Function topics

Use of apps by accessed resource



	Resources	Apps to use
Local apps	<ul style="list-style-type: none">• MS Office apps• PDF Reader• Memo• Permitted apps etc.	Locally available or installed apps
CACHATTO	Internal systems <ul style="list-style-type: none">• Emails• Schedule• Web-system groupware• Address book etc. CACHATTO functions <ul style="list-style-type: none">• CACHATTO user settings• Administrator notifications, etc.	CACHATTO SecureBrowser
	File server	CACHATTO FileManager

Function topics

Editing of files using local apps

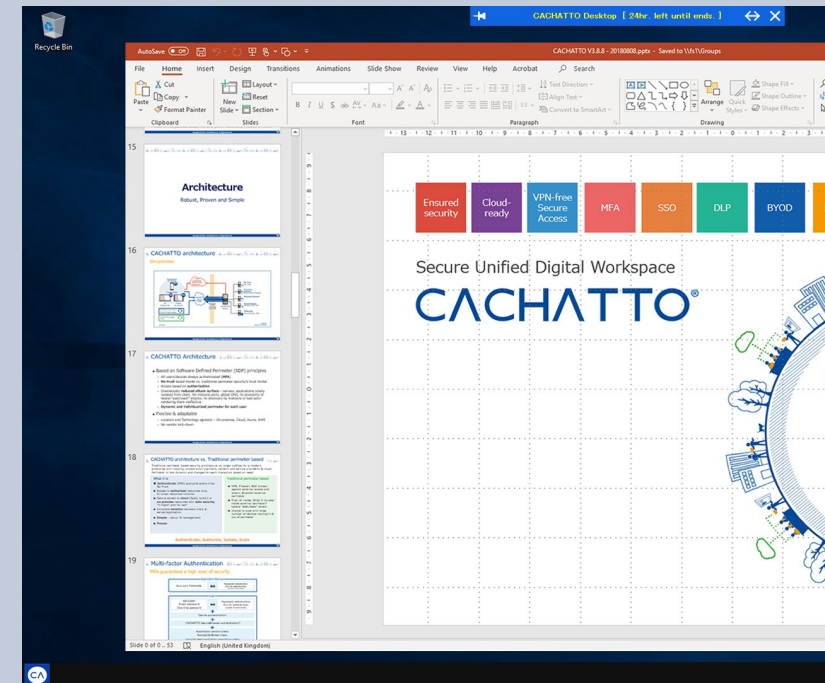
Files can be browsed and edited using locally-installed apps. With off-line capabilities, viewing and editing files is still possible in areas with unstable internet access.

Work comfortably with local resources

Using a local apps provides comfort with file browsing and editing.

Continue working offline

Work can be continued with already downloaded files, without being affected by the network environment.



Function topics

Secure access to Web apps

Cloud services, such as Office 365 or G Suite, and internal business resources are securely available by using CACHATTO SecureBrowser.

Secure cloud services

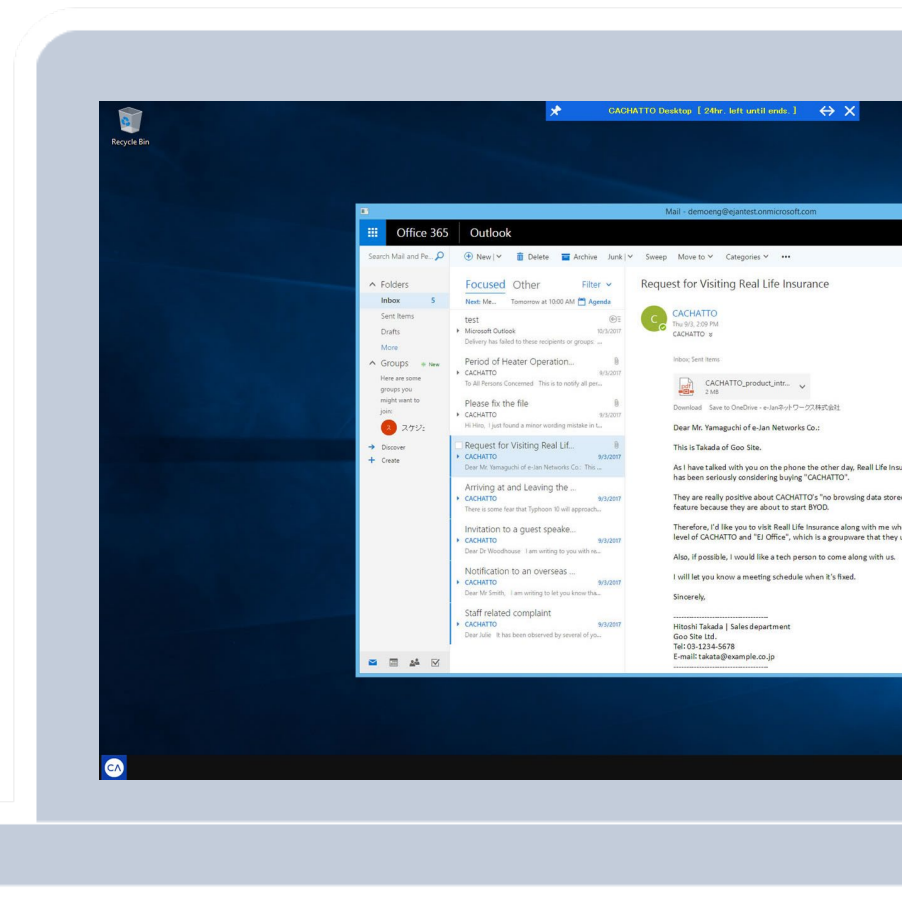
Cloud services are available by using CACHATTO authentication.

Easy login using Single sign-on (SSO)

Single sign-on enables users access to resources without the need for ID and password

Secure file access on the cloud

Files within cloud services are available in the secured virtual workspace.



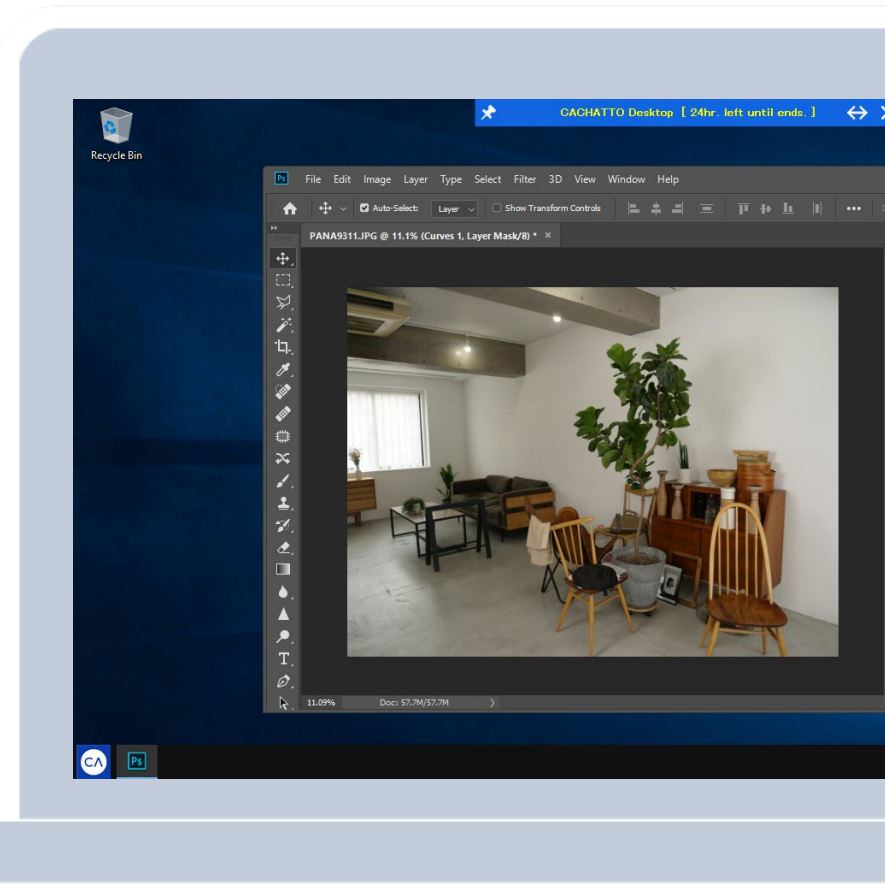
Function topics

Apps individually set by the administrator are also available

By default, only basic apps such as MS Office and PDF Reader are permitted to be used. Other apps*² also can be made available by setting the use permission*¹ in advance from the CACHATTO administrator page.

Use of permitted apps

The CACHATTO server management screen allows users to start and use the permitted apps.



*1 The use permission apps can be specified in the MDM policy setting made by the administrator. *2 For information on the available apps, please contact our representative. *This function requires a CACHATTO server that is CACHATTO V5.6 or higher.

Function topics

Automatic file backup function*1

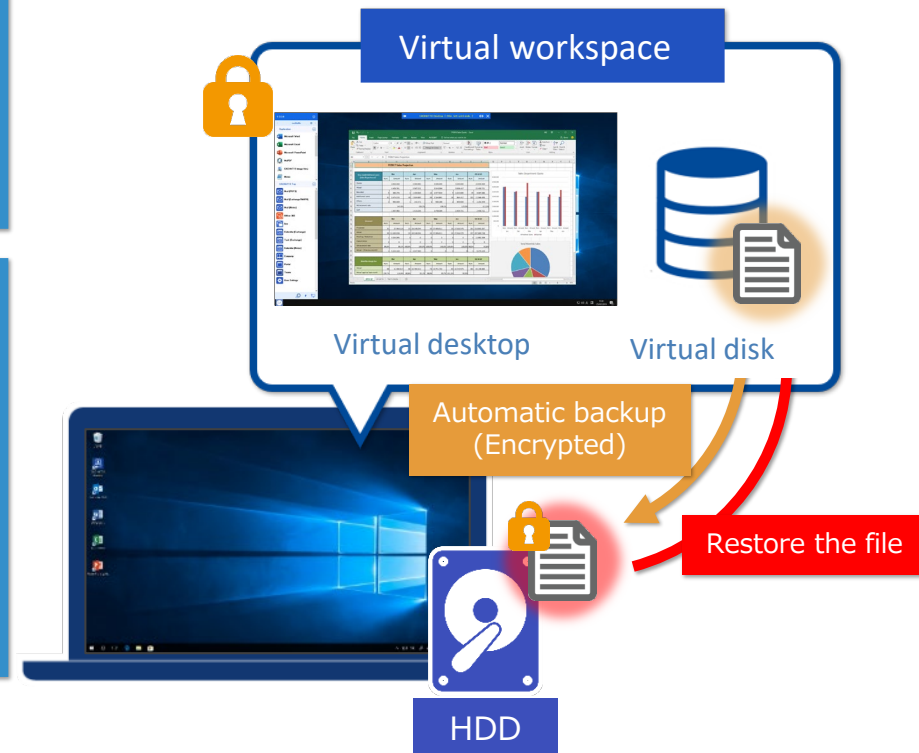
In an event of an unexpected issue with the terminal, such as a restart, the user can feel assured that the files can be restored. Files are saved on the virtual desktop by encrypting and automatically backing it up onto the hard disk.

Files are temporarily saved on the virtual disk

Files are temporarily saved on the virtual disk within the virtual workspace where access from an external area is restricted.

The file can be restored in the event of an issue with the terminal*2*3

Even in the event of an unexpected issue with the terminal, such as a restart or running out of battery, the file can be restored with the automatically backed-up file.



*1 This function can be set to ON or OFF in the MDM policy setting made by the administrator.

*2 The automatic backup is performed when the file is saved. If the file has not been saved, the file cannot be restored.

*3 The automatically backed-up files are deleted when the CACHATTO Desktop is exited. Once it is exited, the file cannot be restored.



Security measures



Measures against malware infection (1)

Blocking access to the virtual disk on the local desktop

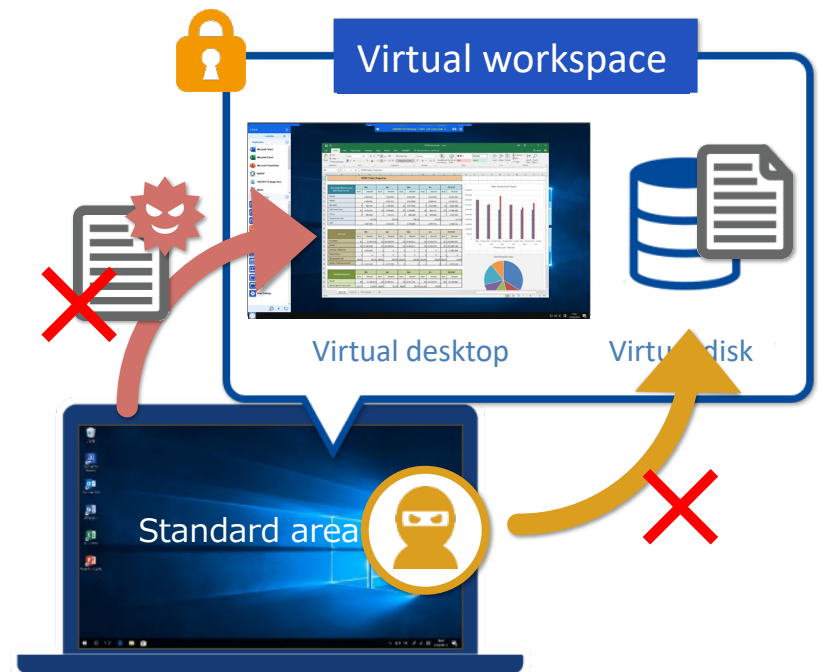
No access is available from the local desktop to the virtual workspace and virtual disk. Copy & paste function from the local desktop can also be disabled.

Restriction on access files in the virtual disk from the local desktop

No malicious programs can access files on the virtual disk.

Restriction on the importing files from the local desktop

Copy & pasting files from the local desktop to the virtual workspace can be disabled. Restriction is applied to prevent malware and malicious files from being introduced into the virtual environment.



Measures against malware infection (2)

CACHATTO is available only when Windows is in a safe state.

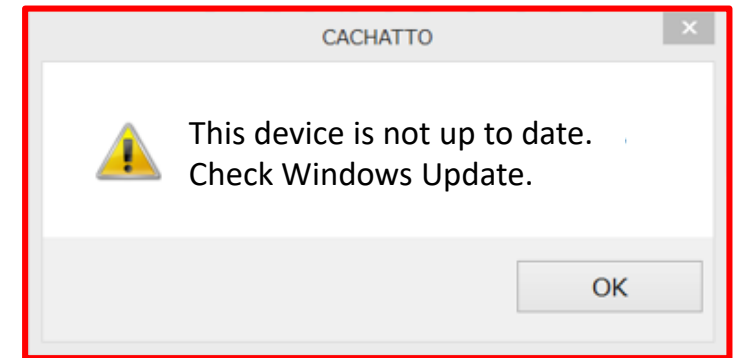
When the user is logged in, CACHATTO checks the application statuses of the anti-malware program and Windows Update. This can minimise risks, such as a takeover of Windows and unauthorised acquisition of information by a key logger.

Checks the status of the malware countermeasure program

When the user is logged in, CACHATTO will not start unless the anti-malware program is up to date.

Checks the status of Windows Update

When the user is logged in, CACHATTO will not start unless the Windows Update is up to date.



Measures against malware infection (3)

Program detection and measures against macro viruses

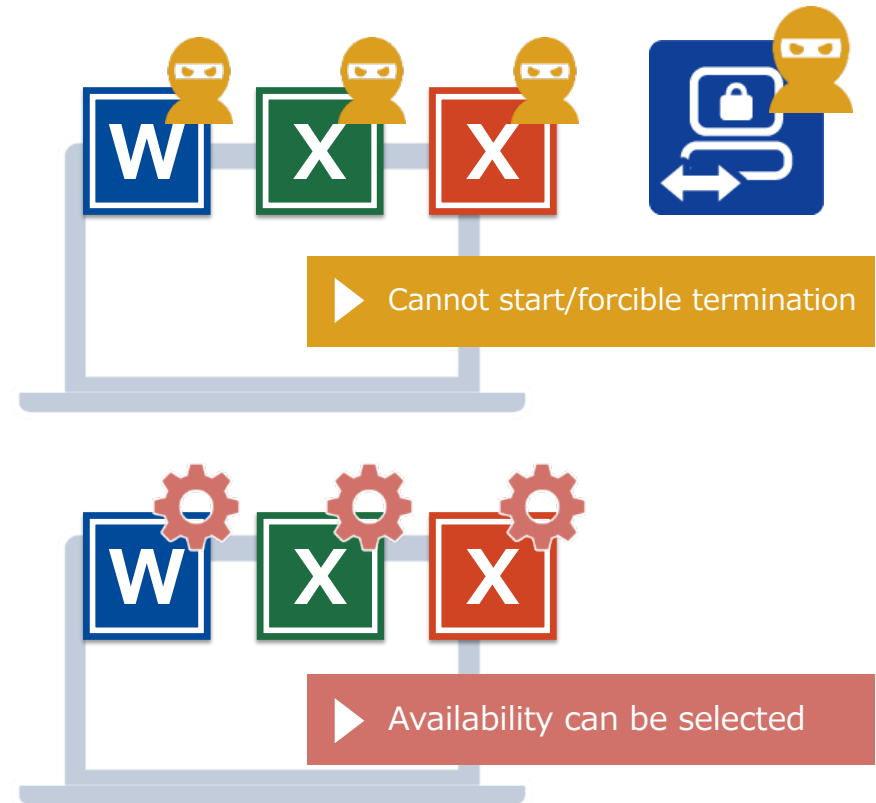
If any cracked program is detected^{*1}, CACHATTO Desktop cannot be deployed. This minimises the risk of confidential information being obtained by a malicious program.

Detection of program falsification

If the CACHATTO Desktop program itself or any of the standard start permission apps (e.g., MS Office) may have been falsified, CACHATTO Desktop is made unavailable to start or is forcibly terminated.

MS Office macro execution can be restricted

When using MS Office, macro can be disabled, reducing the risk of malicious macros being executed.



^{*1} A program with its signature overwritten is considered falsified. This function is unavailable for apps for which use has been individually permitted by the administrator.

Measures against malware infection (4)

Control of exe files

The downloading and execution of exe files can be disabled.

Restrict initialization of exe files

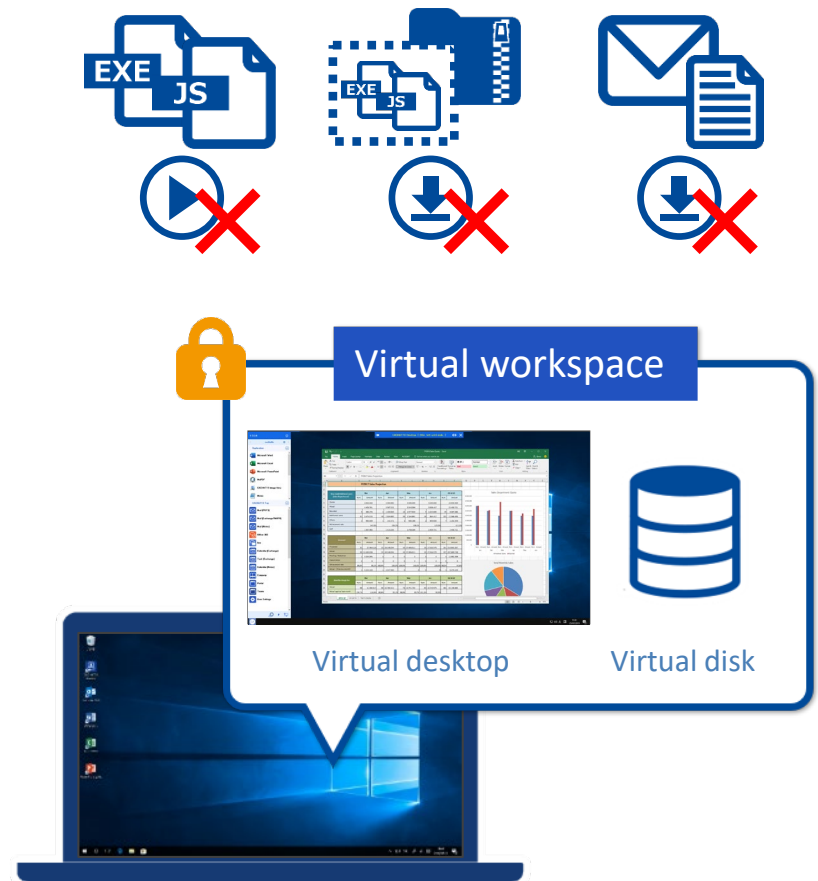
Files with '.exe' or '.js' (or similar format) file extensions are restricted within CACHATTO Desktop.

Control of ZIP files

When decompressing a ZIP file, '.exe' or '.js' (or similar format) files are excluded from the files to be decompressed.

Control of email attachment downloads

Any file with an extension that is not permitted on the management screen cannot be downloaded to CACHATTO Desktop.



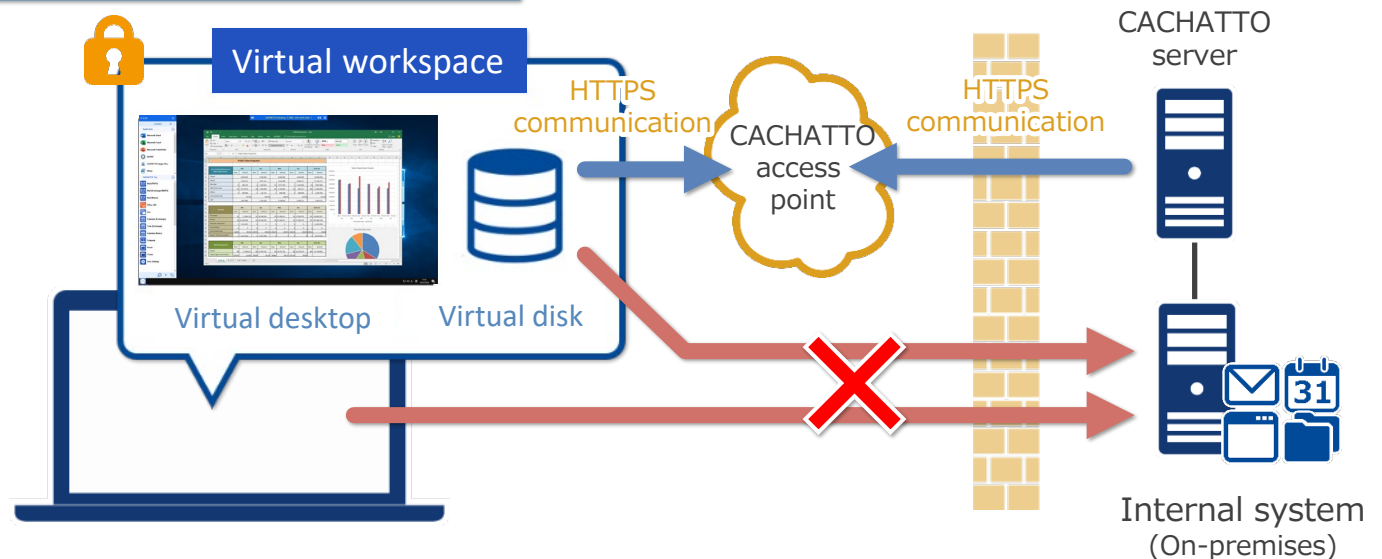
Measures against malware infection (5)

Isolation between an internal network and a remote access PC

CACHATTO Desktop does not directly connect remote PC to the internal network. This minimises security risks from terminals being brought into an internal network.

Connection to the internal system via access point

Connections to the internal system is made through a relay using a dedicated access point; rendering VPN usage or a dedicated line unnecessary. No direct access is made between the internal file server and PC.





Use cases



Use cases (companies promoting telework)

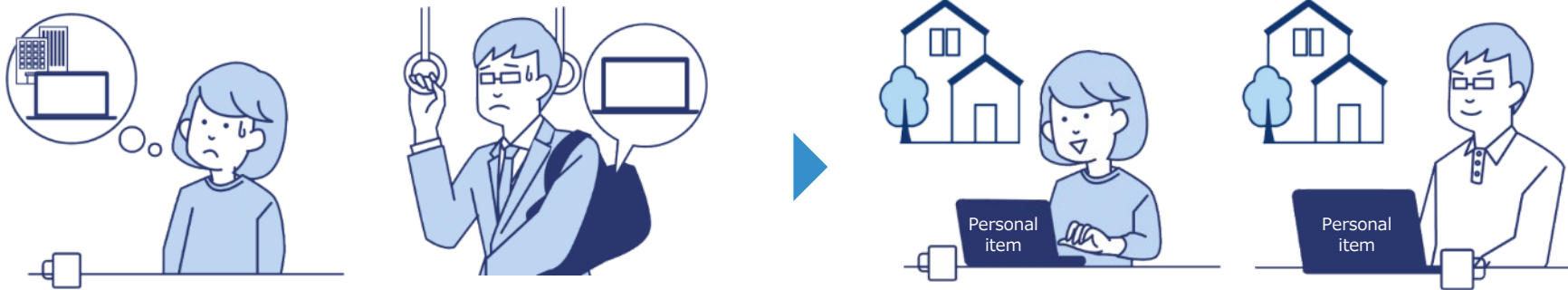
Use of personal PCs for remote and work-at-home personnel

Issues

- In cases of working outside of office due to an unexpected event, like child care or other emergencies, and there is no company-supplied notebook PC on hand.
- Taking laptop PC from work to do '*work from home*'

Solutions

- Installation of CACHATTO Desktop on the user's own PC, providing a secure corporate network access.
- Secure work is possible using personally owned PC without a company-supplied notebook having to be brought back home.



Use cases (Sier/temp agency)

Making use of personal PCs of temporary personnel

Issues

- VPN connection using personally owned PC possess a high security risk.
- The cost of lending PCs to temp staff members who rarely come to the office is high.

Solutions

- With no data being left on workers' own PCs, ensures data security and prevents data leakage.
- PCs can be shared by using CACHATTO Desktop, reducing the cost for setting individual PCs for each personnel.



Use cases (life insurance company)

Secure extranet for partners and affiliates

Issues

- There's no set WAN connection between the company and the affiliated offices.
- Active Directory domains differ, rendering them outside the scope of management.

Solutions

- Installation of CACHATTO Desktop on PCs at each office for remote access
 - ▶ No need setup similar management settings on remote access PCs to the devices in the main office (inventory, AD, software asset management, etc.)
 - ▶ No need to build a network between offices
 - ▶ Minimise the risk of malware being introduced into the company from an unmanaged PC
 - ▶ Set access restrictions to unnecessary servers through access control



Use cases (PC support company)

Secure access environment built for business outsourcing partners

Issues

- Customer information needs to be shared with outsourcing partners.
 - ▶ Distributors, equipment maintenance, etc.
- It is impossible to manage business partners' PCs or ADs using asset management software.

Solutions

- Installation of CACHATTO Desktop on PCs at each office for remote access
 - ▶ Shared data is remained secured without managing the PCs of business partners.
 - ▶ The partners' PCs are prevented from accessing the internal network.
- Access restriction to unnecessary servers through access control





Recommended environment and licensing system



For CACHATTO Users

Supplementary information



- Installation of CACHATTO Desktop on PCs at each office for remote access
 - ▶ CACHATTO V5.6 R7 or later is required
- App installation on client terminal
 - ▶ A dedicated site is provided for downloading the CACHATTO Desktop app.

Recommended operating environment (Windows)

Supported OS ^{*1}	Windows 10 (64bit), Windows 8.1 (64bit), Windows 7 (32bit/64bit)
Supported software ^{*2*3}	Microsoft Office Excel, Word, PowerPoint 2010 or later Microsoft Visio, Project (Project Standard) 2016 WPS Office (former Kingsoft Office 2016)
CPU	Core i3-6100U equivalent or higher, and Core i5-3200 equivalent or higher ^{*4}
Memory	4GB or more ^{*5}
Hard disk	Free space of 200 MB or more must be available
Display	Fulfills OS system requirements
Network	Capable of internet connection
Others	<ul style="list-style-type: none">• Administrative privilege is required for installation• User account control must be enabled

*1 User account control must be enabled.

*2 Must be pre-installed. Only the product version of Microsoft Office is supported. Support is not provided for the evaluation version. Support is provided for the Office apps of the local installation type that are offered through Office 365. (Note that the location to save documents will be limited to within CACHATTO Desktop.)

*3 The Universal Windows Platform version (Store App version) of Microsoft Office 2016 is not currently supported.

A PC released after Windows 10 Fall Creators Update may have the Store App version pre-installed. In such cases, install the desktop version of Microsoft Office.

*4 Except for the low voltage version of Core i5-3xxxU. The low voltage version must be i5-5257U or higher.

*5 The required free memory capacity when starting CACHATTO Desktop is 512 MB or 768 MB when the memory of the PC is 4 GB or 8 GB, respectively.

* The built-in Administrator cannot start CACHATTO Desktop due to the security specifications. CACHATTO Desktop needs to be started by a general user with administrative privileges or standard user privileges.

* CACHATTO Desktop may be unavailable depending on each user's operating environment. Please perform thorough trial operation before introducing the product.

Recommended operating environment (Mac)

Supported OS	OS X 10.14 Mojave or later
Supported software ^{*1}	iWork (Pages, Numbers, Keynote, iMovie) Microsoft Office 365/2019, Office 2016 or later (Excel, Word, PowerPoint) ^{*2} Adobe Acrobat Reader DC Mac standard apps (Memo, Preview, Text Edit, Stickies)
CPU	Core i5 equivalent or higher
Memory	4GB or more
Display	Fulfills OS system requirements
Network	Capable of internet connection

^{*1} Must be pre-installed. Only the product version of Microsoft Office is supported. Support is not provided for the evaluation version. Support is provided for the Office apps of the local installation type that are offered through Office 365. (Note that the place to save documents will be limited to within CACHATTO Desktop.)

^{*2} Support is not provided for the Office version for which use under OS X is not recommended by Microsoft.

^{*} CACHATTO Desktop may be unavailable depending on each user's operating environment. Please perform thorough trial operation before introducing the product.



Inquiries