

Qubes OS

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What is Qubes OS?

- **A reasonably secure OS**
- **Security by compartmentalization**
- **Each application will run in “qubes”**
- **Disposable qubes, unforgeable window borders, firewalls, Integration with Whonix**

A look at Qubes OS

The screenshot displays the Qubes OS desktop environment. On the left, a Mozilla Thunderbird window titled "[work] Secret email test" is open. The email content is as follows:

OpenPGP Good signature from Joanna Rutkowska <joanna@invisiblethings.org>
Key ID: 0xD7C45BCE / Signed on: 07/24/2014 04:25 PM

From Joanna Rutkowska <joanna@invisiblethingslab.com> ☆
Subject Secret email test 16:25
To Joanna Rutkowska <joanna@invisiblethingslab.com> ☆

The content of this exemplary message has been encrypted (and now, when the screenshot is taken, decrypted) via Qubes Split GPG service with a GPG frontend running in the same domain as Thunderbird is, while the GPG backend running in a separate, network disconnected "work-gpg" domain, where my work-related GPG keys are kept. The access to the keys requires approval by the user (with a configurable "timeout") and is also visually indicated via tray notification (see bottom right of the screen) each time the domain asks the GPG server for performing an operation using any of the keys. In this respect work-gpg acts similar to a smart card, which performs crypto operations when asked by applications. Thunderbird/Enigmail only needs to be supplied with the path of the GPG agent to execute instead of the standard /usr/bin/gpg.

On the right, the Qubes VM Manager window is open, showing a list of domains and their CPU usage:

Name	State	CPU
dom0	Running	11 %
usbvm	Running	0 %
netvm	Running	0 %
firewallvm	Running	0 %
itlvpn	Running	0 %
disp5	Running	0 %
work-web	Running	0 %
blog	Running	0 %
work	Running	1 %
qubes	Running	0 %
work-gpg	Running	0 %
personal	Running	0 %
work-admin	Running	0 %
vault	Running	0 %

A notification bubble in the bottom right corner reads "Keyring access from domain: work".

Why would you use Qubes OS?

- **If you're very paranoid (not a bad thing)**
- **Avoid mixing your personal and work browsing habits**
- **Sandboxing technology**
- **Should have a relatively decent machine in order to use it**
- **Who is Qubes OS geared towards?**
 - IT security professionals
 - Security enthusiasts
 - Sysadmins.

Let's begin the installation!



QUBES OS

A REASONABLY SECURE OPERATING SYSTEM