



PC-Duo Web Console Installation Guide

***Release 12.7 Hotfix #8
August 2018***

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This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>), cryptographic software written by Eric Young (ey@cryptsoft.com), and compression software from the ZLIB project (<http://www.zlib.net/>)

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Web Console Overview

PC-Duo Web Console is a component of the On-Demand and Enterprise Editions of the PC-Duo Remote Desktop solution from Vector Networks, Inc.

Web Console is a web application that runs on Microsoft Internet Information Services (IIS) and serves as the management user interface for the Gateway Server. It can be used as a replacement for or in conjunction with the standalone Gateway Administrator application.

In Concurrent User license mode (see Gateway > Gateway Licenses sub tab for more information about licensing), the Web Console can be used to launch the Web Desktop to view/control Host desktops connected to the Gateway Server. In this way, the Web Console can be used as a replacement for or in conjunction with the standalone Master application.

The Web Console can also be used to launch the Host on Demand, a streamlined version of the Host that can enable anyone to share their desktop instantly with Account Users connected to the Gateway Server.

1. Web Console Requirements

The following sections describe requirements and prerequisites for installing and running the Web Console:

1.1 Server Hardware Requirements

The following section describes minimum recommended specifications for the hardware needed to install and run the Web Console server application:

Scenario	Server Hardware Requirements
Up to 50 Hosts	<ul style="list-style-type: none">• 2 cores CPU at 2 GHz or faster• 2 GB RAM or more• SQL Server configured for "Max Server Memory" of 1024MB
Up to 1000 Hosts	<ul style="list-style-type: none">• 4 cores CPU at 2 GHz or faster• 4 GB RAM or more• SQL Server configured for "Max Server Memory" of 2048MB
Up to 5000 Hosts	<ul style="list-style-type: none">• 8 cores CPU at 2 GHz or faster• 6 GB RAM or more• SQL Server configured for "Max Server Memory" of 3072MB
Up to 10,000 Hosts	<ul style="list-style-type: none">• 12 cores CPU at 2 GHz or faster• 8 GB RAM or more• SQL Server configured for "Max Server Memory" of 4096MB

1.2 Server Operating System Requirements

Web Console is supported on the following operating systems:

- Microsoft Windows Server 2012 or R2

- Microsoft Windows Server 2008 or R2

NOTE: Web Console is not supported on a server that also runs *Windows Server Update Services (WSUS)*.

NOTE: Web Console is not supported on a server that is also a *domain controller*.

1.3 Server Database Requirements

Microsoft SQL Server must be installed on the Web Console computer before installing the Web Console software. This version of Web Console works with Microsoft SQL Server 2008 R2 or later (including 2012, 2014, 2016, and 2017), and can work with the Express Edition, Standard Edition, or any higher/more capable edition.

The database software may be installed manually before beginning the installation steps below, or alternatively, SQL Server Express can be installed using the Web Platform Installer as described below.

2. PC-Duo Web Console Installation

Follow these steps to install and configure the Web Console:

2.1 PC-Duo Gateway Server Installation

The Gateway Server (Gateway.msi) must be present and running on the same server as the Web Console (GatewayWeb.msi).

Step	Actions
1	For either a new Gateway Server installation or an upgrade from a previous version, double-click Gateway.msi to begin the installation.
2	For a new installation, select both the "Gateway Administrator" and "Gateway Server" components. Upgrades will not prompt for this.
3	For both a new installation and an upgrade you will be prompted for license keys. For upgrades, this is an opportunity to add any additional license keys required.
4	At this point, for an upgrade only, the installation will not ask for any more information and will run to the end without prompting. You may then continue to the next section to verify prerequisite software is installed.
	For a new installation, you will be prompted to enter the Gateway Server Account information. This is the user account under which the Gateway Server's service will run.
	On a server joined to an Active Directory domain, the default account name will be "DOMAIN\RemoteControlGateway". The installer will create this domain account in Active Directory for you.
	On a standalone server (not joined to a domain), the default account name will be "COMPUTERNAME\RemoteControlGateway". This account MUST be created manually in Windows Computer Management BEFORE continuing. The account does not have to be a local Administrator, but it will require the "Log on as a Service" right. After creating the account, open Administrative Tools -> Local Security Policy. Expand Local Policy, highlight User Rights

Assignment, and find "Log on as a Service" on the list and add the Gateway Server Account that you just created (DOMAIN\RemoteControlGateway) to the list.

2.2 PC-Duo Web Console Prerequisites

Web Console requires several prerequisites to be in place before actual installation:

Step	Actions
1	Install all available Windows Updates on your Windows Server Operating System. Anything listed as "Optional" updates are not required.
2	<p>Visit the following link to download and install the Microsoft Web Platform Installer: http://www.microsoft.com/web/downloads/platform.aspx. This is essentially a package manager that allows you to conveniently download and install each of the PC-Duo Web Console's pre-requisites found in the next step.</p> <p>NOTE: Microsoft Windows Server operating systems normally ship with the "Internet Explorer Enhanced Security Configuration" feature enabled. This may prevent the downloading of the Web Platform Installer package while using a web browser directly on the server. For this reason, it might be easier to download the package from a different desktop machine and copy the package manually to the server for installation.</p>
3	<p>Launch Web Platform Installer (5.0 or later), click Products from the top-most section and then begin selecting the below components from the list of items:</p> <ul style="list-style-type: none"> • IIS: ASP.NET • IIS: Basic Authentication • IIS: Windows Authentication • IIS: Management Console • IIS: HTTP Redirection • IIS Recommended Configuration • Microsoft .NET Framework 4.5.2 • Select the latest version of SQL Server Management Studio Express. As of this writing, this is SQL Server 2008 R2 Management Studio Express with SP1 • Select the latest version of SQL Server Express. As of this writing, this is SQL Server Express 2008 R2 Service Pack 2. This selection may be omitted if a supported SQL Server version is already installed.
4	If using SQL Server Express, you may be prompted to enter a password for the "sa" administrative account. This is a SQL Server Express specific account used for administration, not a Windows user account. Enter a password then click Continue.
5	Click I Accept and agree to the licenses and list of dependencies.
6	<p>After installation, run the following commands in an elevated command prompt. This ensures that ASP.NET v4 is properly registered with Internet Information Services (IIS)</p> <ul style="list-style-type: none"> • <code>cd "C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319"</code> • <code>aspnet_regiis -i</code>

2.3 SQL Server Configuration

Step	Actions
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- 1 Open SQL Server Management Studio, click **Connect** on the “Connect to Server” screen.
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- 2 Right-click the server name in the “Object Explorer” pane and click **Properties**
 - Highlight **Memory** and assign the appropriate value for the “Max Server Memory” field. These values are given in the “Server Hardware Requirements” earlier, and are generally half of the total memory of the system.
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2.4 PC-Duo Web Console Installation

Step	Actions
1	Double-click GatewayWeb.msi to install the Web Console.
2	When prompted to select a database server, leave the default values as “(local)\SQLEXPRESS” and “Windows authentication credentials of current user” and click Next to continue the installation.
3	When prompted to select a web site authentication method, select one of the following: <ul style="list-style-type: none"> • Forms Authentication – An ASP.NET authentication mode where a session cookie is issued as proof of authentication. This method is preferred over those built into the Web Browser because it works consistently, including supporting Logout and “Login-As”, and works reliably from Apple (Mac & iOS) devices. (Recommended) • Integrated Windows Authentication – Microsoft NTLM or Kerberos V5 authentication for use in environments desiring Single Sign-On capability <p>NOTE: When upgrading from v12.6 or earlier, if the existing web site is using Basic Authentication then it will be converted to Forms Authentication by the installer.</p>
4	Click Next and then Install to continue the installation.
5	Click Finish . Internet Explorer will automatically launch and bring you directly to the Web Console’s login prompt (<a href="https://<servername>">https://<servername>). Note that it’s normal to receive the website certificate error because the default one is not trusted. Please read the following section before attempting to log in for the first time.

2.5 PC-Duo Web Console First Time Login

Once you reach this point in the installation process and are ready to log into your Web Console for the first time, it is suggested that you review the *PC-Duo Web Console Operations Guide* for additional information about first-time configuration.

The user account credentials (domain\username and password) you supply to log into the Web Console for the first time **must** meet one of the following criteria:

- The local user account named “Administrator”
- A domain user account that is a member of the Local Administrators group
- A local account that is a member of the local Administrators group – but only if UAC (User Account Control) is disabled

The user account credentials you provide when logging into the Web Console for the first time will automatically become an Administrative account.

NOTE: Do not attempt to log into the Web Console as the Gateway Service Account.

NOTE: If UAC is enabled, local machine accounts that are members of the Local Administrators group do not run as elevated users and therefore do not have the rights that are given to the Local Administrators group. For this reason local machine accounts should not be designated as Administrative account type when UAC is enabled.

2.6 PC-Duo Web Console Account Management

Each user account imported into your Web Console's **Accounts** tab will be designated as one of the following three account types: **Administrative** users, **Master** users, or **Personal** users.

- **Administrative Accounts** are users who are expected to have Full Control/Administration rights, including the ability to view & modify Gateway Server settings, configure access rights for all other users of the Master and Personal account types, and run usage reports. A user of an Administrative account type will see all tabs in the Web Console.
- **Master Accounts** are users who will need day-to-day access to Host desktops for remote support and remote collaboration. Users of this account type typically do not have administration rights over the Gateway Server. They may be granted a broad level of access to Hosts and Groups, but will see only the Home, Hosts and Recordings tabs.
- **Personal Accounts** are users who log into Web Console for access to a specific Host computer – usually their desktop PC at the office. Personal Accounts are ideal for work-from-home and on-the-road employees, and for guest employees who need access to one and only one Host desktop.

Accounts can be imported, modified or deleted by Administrative Account Users on the **Accounts** tab in the Web Console.

Follow the steps below to create new accounts in the Web Console.

Step	Actions
1	From the Web Console, click Accounts and then click Import New Account .
2	Select the location where the account resides. This is either the local computer name or the name of the domain if the computer is joined to a domain.
3	Enter the account name (or part of) to import.
4	Click CheckNames to verify the account or group name entered. If more than one account name, a list will be provided to choose from.
5	Click Next .
6	Select an account type for the user and click Next . <ul style="list-style-type: none"> • For an Administrative account, the account must meet the criteria specified above in the "Login" section. • For a Master account, select the Host Groups that this account will be able to access (i.e. "All Hosts"). Note that Host Groups would first need to be created, which can be done from the "Hosts" tab • For a Personal account, choose the single Host that this account will be able to access.
7	Click Save . New accounts will now appear on the Accounts page where they can be viewed or managed.

3. Host on Demand Activation

To enable the "Share My Desktop" button on the Web Console's landing page, first visit the landing page itself in your web browser and log in as an Administrative Account User. Follow the steps below to enable the Host on Demand feature.

Step	Actions
1	Visit the Gateway tab and then the Web Console Settings sub tab
2	Within the Application Access - Internal section, click Edit and input the LAN IP of the server, the NETBIOS server name, or a DNS name that resolves to the server (i.e. pcduo.companyname.com).
3	Within the Application Access - External section, click Edit and input the public IP of your server, or a DNS name that resolves to the server (i.e. pcduo.companyname.com).

Best practices would be to create a DNS alias that resolves to the server both externally and internally. Then, if the server's IP address happens to change at any point later, no adjustments will be needed within PC-Duo to retain an operational state.

- 4 Within the **Host on Demand** section, click **Edit** and select configuration options below:

HOST ON DEMAND

1) Share my Desktop: ☒ Enabled ☐ Disabled

2) Station Name: %USER% on %NAME%

3) Connection Permission: ☒ None ☐ Required ☐ Requested

4) Connection Permission Timeout: 30 seconds

5) Lock workstation if permission requested but not explicitly granted: ☐ Yes ☒ No

6) Host Extension Tag:

NAME (max 128 characters): HOD

VALUE (max 1024 characters): yes

Update Cancel

- 1) *Share My Desktop*: Choose **Enable**
- 2) *Station Name*: Configure how you would like the Hosts to be displayed in the Host Name field of the Web Console. The default setting will result in names of the form:

DOMAIN\jsmith on COMPUTERNAME

- 3) *Connection Permission:*
- **None** - Connect immediately with no prompt to the Host user.
 - **Required** - Connect only with Host user approval.
 - **Request** - Allow the Host user to reject the connection if present, but still allow the connection to complete after the timeout expires and the Host user is not present.
- 4) *Connection Permission Timeout:* If Connection Permission is set to **Required**, this is the amount of time that the Connection Permission prompt appears to the Host user before automatic rejection.
- If Connection Permission is set to **Requested**, this is the time given to the Host user to allow or reject the connection.
- 5) *Lock workstation if permission requested but not explicitly granted:* If Connection Permission set to **Request**, always set this to **No**.
- 6) *Host Extension Tag:* Enter an optional extension tag to cause the Host to enter a non-default group other than the group "Host on Demand".
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