

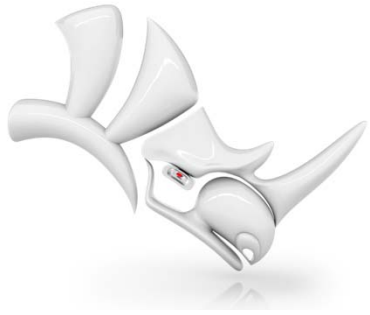
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## What's New in Zoo 5

**Presenter:** Dale Fugier  
Robert McNeel & Associates  
March 24, 2014



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**Presenter: Dale Fugier**

Rhinoceros Development  
Robert McNeel & Associates, Seattle WA  
dale@mcneel.com

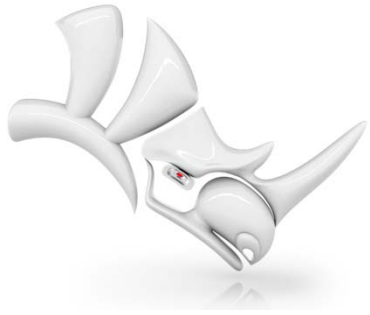


**Assistant: Mary Ann Fugier**

Technical Support Training  
Robert McNeel & Associates, Seattle WA  
mary@mcneel.com



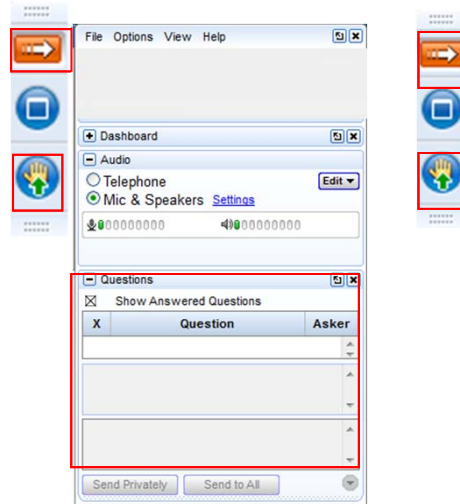
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## GoToWebinar Control Panel



- Open and close your GoTo Panel
- Audio page to select Telephone or Mic/Speakers
- “Chat” questions anytime
- “Raise your hand” during “Open Mic” questions
- “Open Mic” at the end of today’s session

All sessions will be **recorded and posted**: <http://wiki.mcneel.com/rhino5live>

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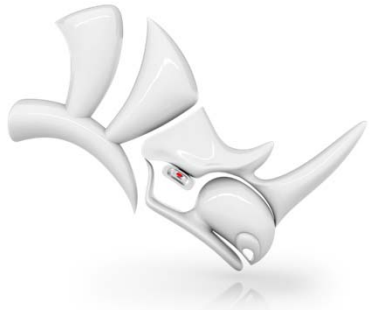
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## What is the Zoo?

- The Zoo is a network, or floating, license manager.
- The Zoo lets you share licenses among users on your network.
- The Zoo is useful if you have more users of Rhino than you do licenses of Rhino.

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## How does the Zoo work?

1. When a network node starts, it requests a license from the Zoo.
2. The Zoo assigns an unused license, from its license pool, to the network node.
3. When the network node shuts down, the license is returned to the Zoo's license pool.

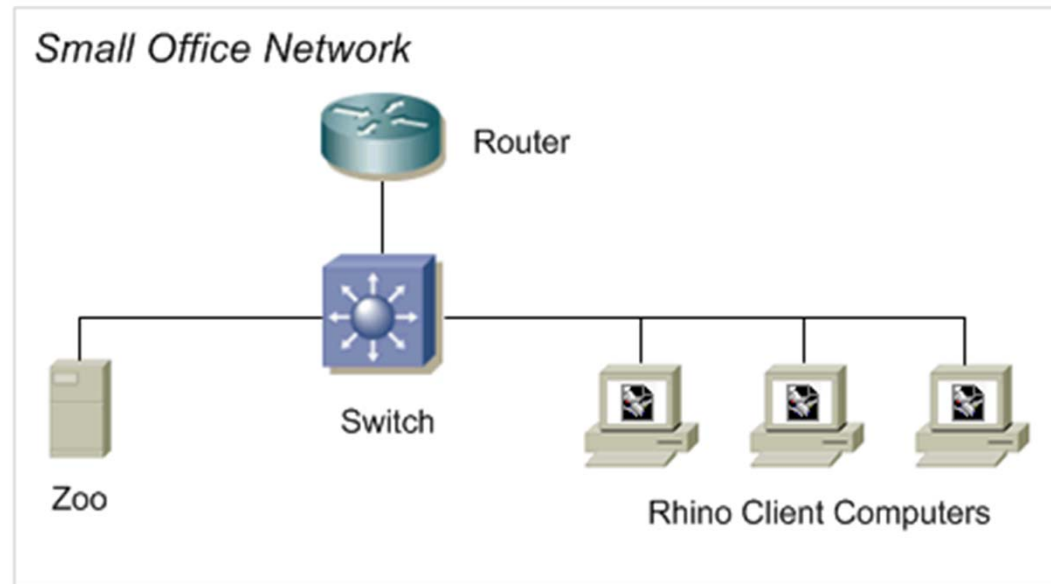
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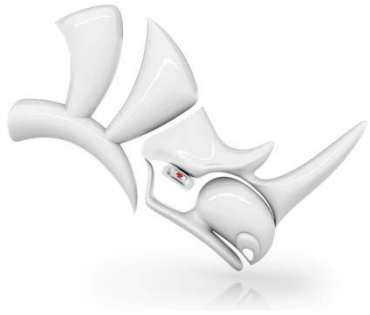
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## Zoo on Small Networks



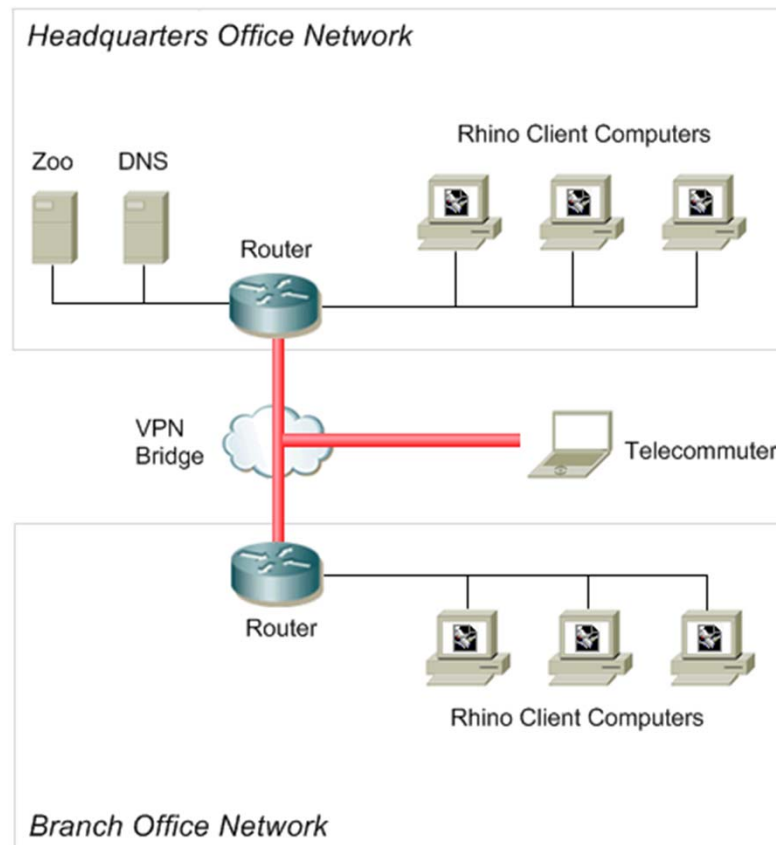
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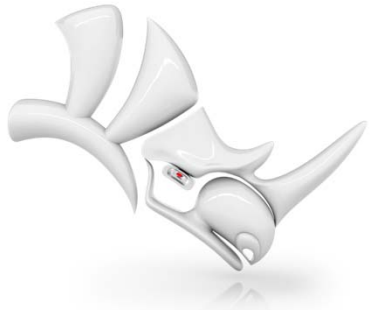
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## Zoo on Large Networks



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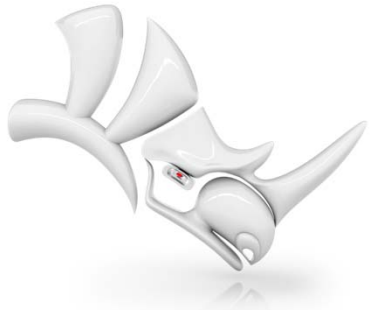
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## What are the Zoo's features?

- **The Zoo is free!**
- **No extra costs** – No special version of Rhino is needed.
- **No special server required** - Zoo will run on any Windows-based system.
- **Simple setup** - Install Zoo on any system, and enter the licenses into the Zoo instead of the individual systems.
- **Robust** – Network nodes will keep working even if the network connection or server is down.
- **Check out** - License keys can be checked out so laptop users can disconnect from the network.

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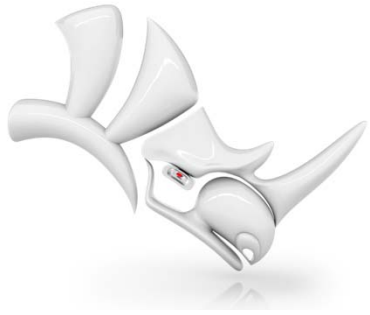
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## Why a new Zoo 5?

- **Old** – The core of Zoo 4.0 was written when Novell Netware was the dominant LAN operating system.
- **Obsolete protocol** – Zoo 4.0 communicates using NetBIOS (Mailslots).
- **Firewall unfriendly** – Administrators must open firewall ports on server, client, and routers.
- **WAN unfriendly** – Accessing Zoo 4.0 across a WAN/VPN is difficult to impossible.
- **Domain/Workgroup limited** – Rhino systems must belong to the same Windows Domain/Workgroup as the system running Zoo 4.0.

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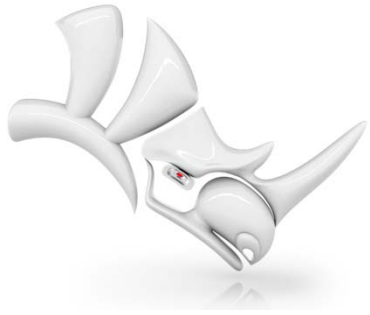
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## What's new in Zoo 5?

- **New!** - Zoo 5 is a brand new version, not an upgrade.
- **Standard Internet Protocol Support** - Clients communicate with Zoo 5 using HTTP.
- **Firewall Friendly** - Administrators no longer need to open firewall ports on client machines or routers.
- **Limited License Check Out** - Zoo 5 allows the administrator to specify the license check out duration.
- **3rd Party Plug-in Support** - Zoo 5 allows 3rd party plug-in developers to add support for their products to the Zoo.

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## What supports Zoo 5?

- Rhino 5 supports Zoo 5.
- Rhino 5 does not support Zoo 4.0.
- Rhino 4.0 does not work with Zoo 5.
- You can run both Zoo 4.0 and Zoo 5 running on the same network, and even installed on the same system “side by side”.

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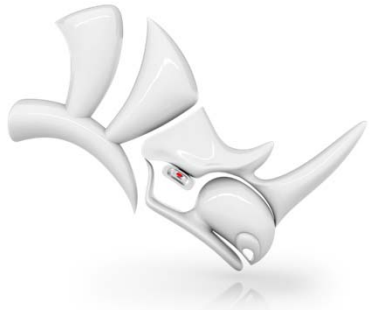
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## Service Release 6 (SR6)

- Support added for **Brazil 2.0, Bongo 2.0, Flamingo nXt and Penguin 2.0** licenses.
- Rhino 5 SR6 includes a new license manager client (LM) that allows Brazil 2.0, Flamingo nXt and Penguin 2.0 to support Zoo 5.
- When an above product needs a license from a Zoo, the LM attempts to obtain a license from the Zoo 5 server.

*If no license was obtained or if the Zoo 5 server was not found, then the LM tries to obtain a license from the Zoo 4.0 server.*

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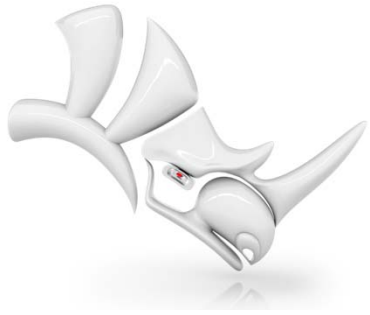
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## *New in Service Release 8 (SR8)*

- **License monitoring** - Zoo now allows license monitoring from a web browser. Just visit the Zoo's status page.  
**[http://<zoo\\_server\\_host\\_name>/status](http://<zoo_server_host_name>/status)**.
- **Serial number exporting** - Zoo can now export a comma-separated-value (CSV) file that contains the serial numbers (not CD keys) of all licenses maintained by the Zoo.

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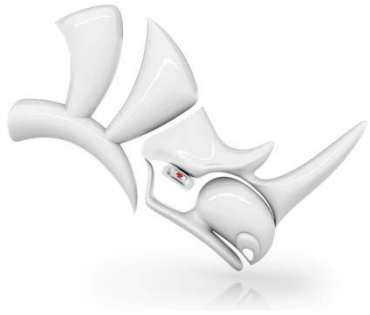
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## What is required to run Zoo 5?

- Any Windows XP or greater system with a network connection.
- Microsoft .NET Framework 4.
- Zoo 5 is a 32-bit application.

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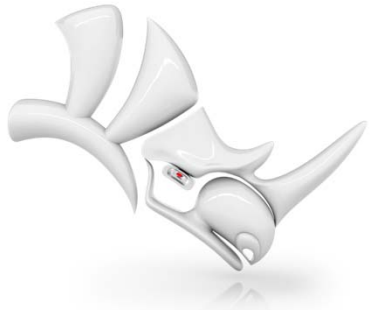
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## How do you get started?

- Download and install Zoo 5 on a Windows-based system.
- Open **TCP Port 80**, for both incoming and outgoing traffic, on firewall software that is running on the system.
- Run **ZooAdmin** and add your Rhino 5 CD-Keys.
- Install Rhino 5. During the installation, select **Network Node** as your license type.
- Run Rhino, and specify either the **host name** or **IP address** of your Zoo server.

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## The Zoo Administrator

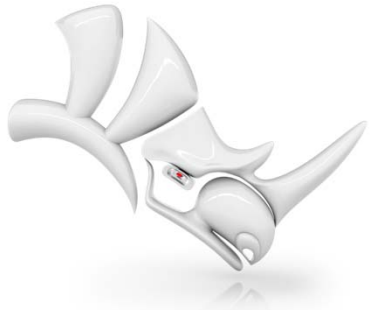
- Primary management tool

The screenshot shows the 'Zoo 5.0 Administrator' window with a menu bar (File, Edit, View, Tools, Help) and a toolbar. Below is a table of license information:

Product	Type	Serial Number	Status	Computer	User
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (0)	Checked Out	Chinook.mcneel.com	dale
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (1)	In Use	WIN-LA212COFPRK	jb
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (2)	Available		
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (3)	Available		
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (4)	Available		
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (5)	Available		
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (6)	Available		
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (7)	Available		
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (8)	Available		
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (9)	Available		
Rhinoceros 5.0 Educational Lab License	Release	4-1500-0104-100-0000185-57000 (10)	Available		

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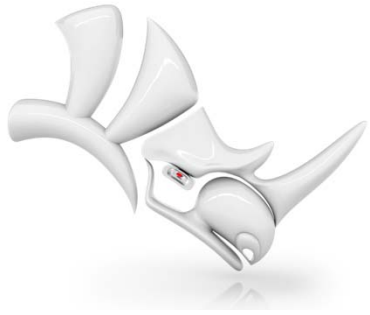
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## The Zoo Administrator

- Add licenses

A screenshot of a software dialog box titled "Add License". The dialog box has a standard Windows-style title bar with a close button (X) in the top right corner. The main content area contains four labeled input fields: "Product type:" with a dropdown menu showing "Rhino 5.0"; "Registered owner:" with a text box containing "Dale Fugier"; "Registered organization:" with a text box containing "Robert McNeel & Associates"; and "Product license code or CD key:" with an empty text box. At the bottom of the dialog box are two buttons: "OK" and "Cancel".

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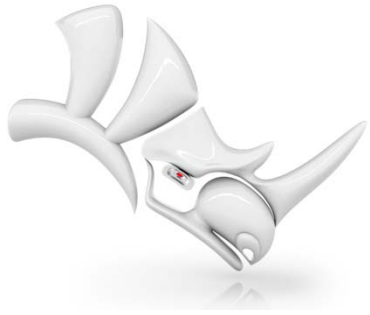
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## Adding Rhino 5 licenses

- When you add a Rhino 5 license, you will be asked to validate the license online.
- **Critical: if you are upgrading to Rhino 5, you need to keep track of which previous version CD-Key you used to upgrade.**
- **You can only use each previous version CD-Key once.**
- The only piece of information used during license verification is your CD-Key, which is included when you buy Rhino.

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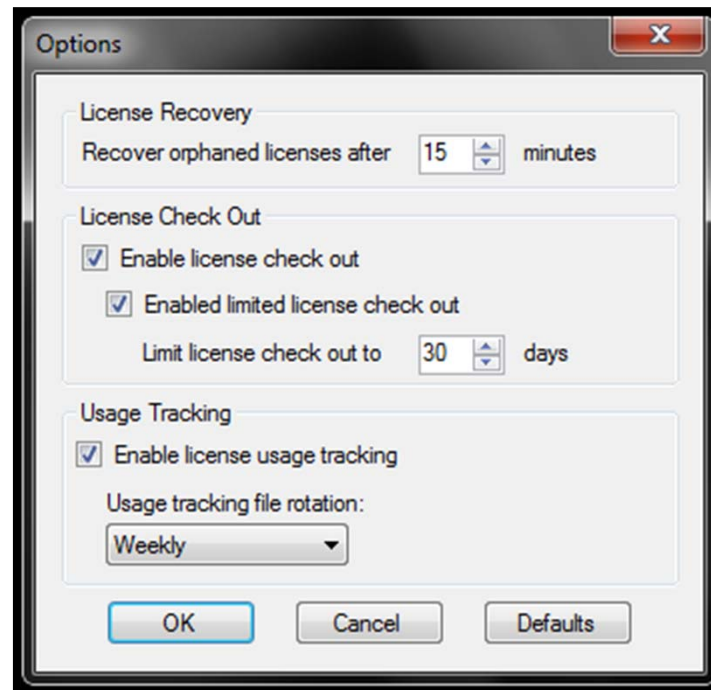


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## The Zoo Administrator

- Configure options




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## Installing Rhino



modeling tools for designers



### Enter License Information

Name:

e-mail:

Organization:

Evaluate Rhino

License Key:

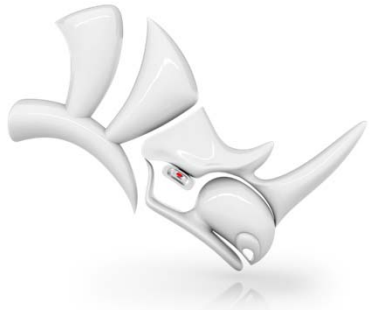
Float my license on the network using **the Zoo**  
*The Zoo must be installed on your network for Rhino to start.*

I agree to the **terms and conditions**

Send registration information to McNeel

**Next >**

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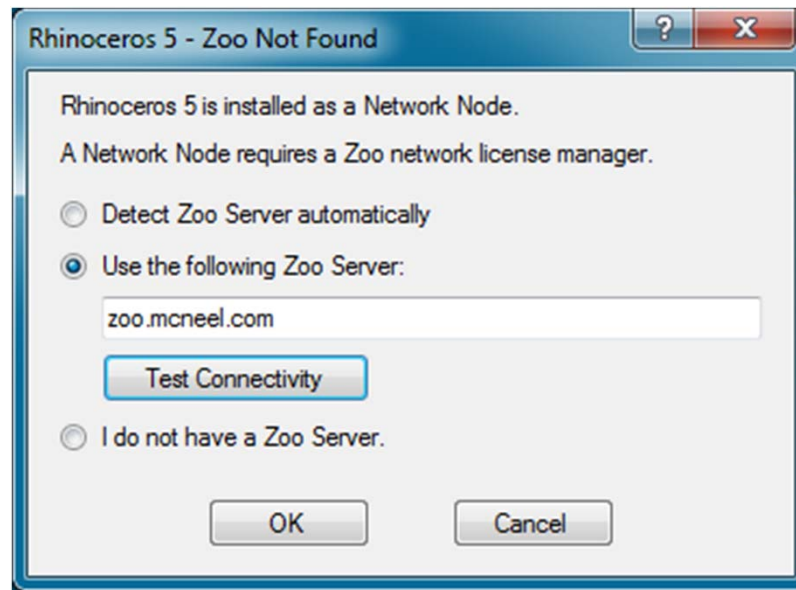


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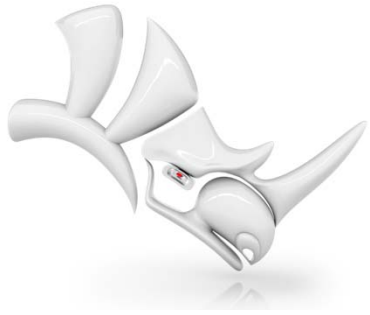
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## Run Rhino

- Specify name of Zoo server



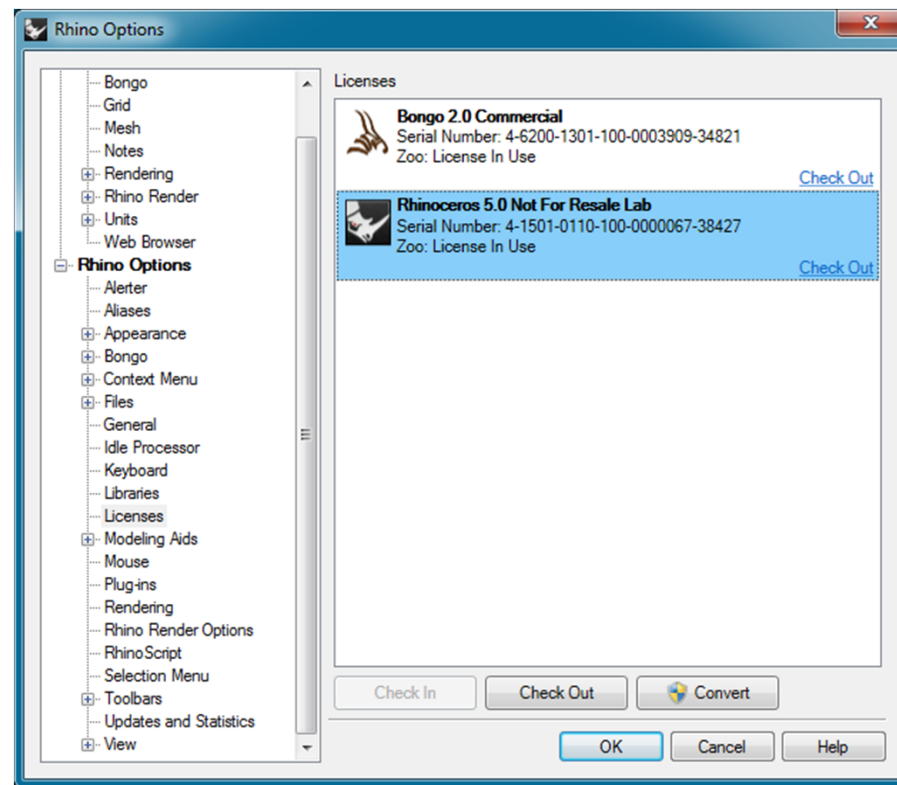
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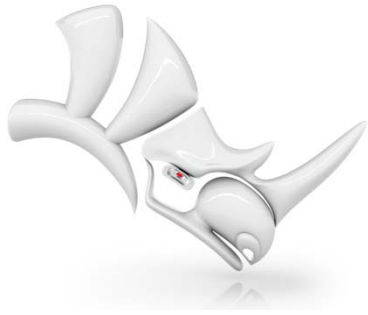
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## View Licenses



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## Monitor Licenses

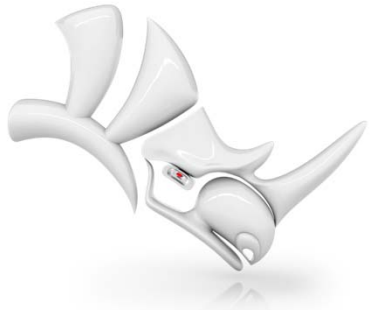
Zoo (ZOO.mcneel.com)

Version 5 SR8  
(5.8.40224.15545, 2/24/2014)  
Copyright © 1993-2014, Robert McNeel & Associates.  
All rights reserved.  
<http://www.rhino3d.com/zoo>

3/12/2014 8:39:56 AM

No	Product	Type	Serial Number	Status	Computer	User
1	Rhinoceros 5.0 Commercial	Release	4-1500-0101-100-0012517-23376 (0)	Checked Out	Booter.mcneel.com	mary
2	Rhinoceros 5.0 Not For Resale Lab	Release	4-1501-0110-100-0000067-38427 (0)	In Use	CHINOOK.mcneel.com	dale
3	Rhinoceros 5.0 Not For Resale Lab	Release	4-1501-0110-100-0000067-38427 (1)	Available		
4	Rhinoceros 5.0 Not For Resale Lab	Release	4-1501-0110-100-0000067-38427 (10)	Available		
5	Rhinoceros 5.0 Not For Resale Lab	Release	4-1501-0110-100-0000067-38427 (11)	Available		
6	Rhinoceros 5.0 Not For Resale Lab	Release	4-1501-0110-100-0000067-38427 (12)	Available		

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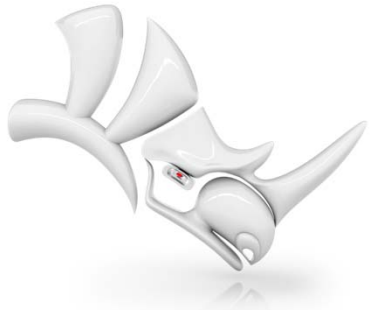
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## Zoo Diagnostics

- The Zoo Diagnostics utility runs on a Rhino 5 workstation.
- Provides a number of useful network diagnostics to assist you in troubleshooting connectivity issues between Rhino workstations and Zoo servers.
- Allows you to view and modify the name of Zoo server used by Rhino workstations. The Zoo server name is stored in the Windows Registry.
- <http://wiki.mcneel.com/zoo/zoo5diagnostics>

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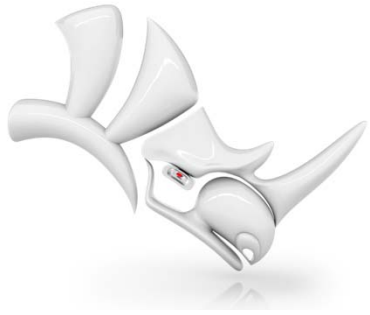
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## Zoo Diagnostics

```
Zoo Diagnostics
File Edit Diagnostic Help
Zoo Server zoo.mcneel.com | 1 2 3 4 5
NSLOOKUP
Server: wahoo.mcneel.com
Address: 204.177.179.3
Name: zoo.mcneel.com
Address: 10.67.30.197
TRACERT
Tracing route to zoo.mcneel.com [10.67.30.197]
over a maximum of 30 hops:
1 <1 ms <1 ms <1 ms ZOO [10.67.30.197]
Trace complete.
ZOOPORT
Host "zoo.mcneel.com" listening on TCP port 80.
ZOOECHO
Connectivity test with the Zoo server "zoo.mcneel.com" successful.
```

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## Zoo Support

### Help

<http://docs.mcneel.com/zoo/5/en/index.html>

### Wiki

<http://wiki.mcneel.com/zoo/zoo5>

### Support

<http://discourse.mcneel.com/category/zoo>

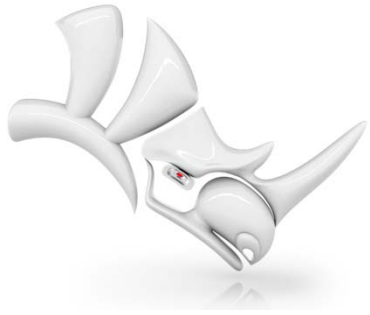
### Email

[tech@mcneel.com](mailto:tech@mcneel.com)

### Development

<http://wiki.mcneel.com/developer/zoo>

[dale@mcneel.com](mailto:dale@mcneel.com)



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## Helpful Links

**Dale Fugier**

[dale@mcneel.com](mailto:dale@mcneel.com)

**Rhino website**

[www.rhino3d.com](http://www.rhino3d.com)

**Rhino Support**

[www.rhino3d.com/support](http://www.rhino3d.com/support)

All sessions will be **recorded and posted:**

<http://wiki.mcneel.com/rhino5live>

[dale@mcneel.com](mailto:dale@mcneel.com)



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