

Saphyr System Installation Networking and IT Checklist

A Saphyr site preparation call will be planned by your Bionano support team, allowing us to help you completing this checklist.
To make the installation of the Saphyr System at your site a success, please consult the [References](#) section as your primary source of information.
Once complete, please send back this document by email.

Company Name	Company name	Date	Date
Instrument Location (laboratory / service)	Detailed instrument location	System Setup	Saphyr System.
			Compute solution
			Sales type

Customer Point of Contact

Project Leader	Name	Phone	Number	Email	Email
IT / Network	Name	Phone	Number	Email	Email
Bionano Genomics Points of Contact - Always include support@bionano.com in any existing or new conversations					
FSE	Name	Phone	Number	Email	Email
GDS	Name	Phone	Number	Email	Email

Infrastructure and Networking configuration

Saphyr Instrument Controller

The Saphyr Instrument Controller will run in kiosk mode where the user may only interface with the Saphyr Instrument Control Software (ICS). All required features including computer administration (network configuration and system clock settings) are provided within the Saphyr ICS. Bionano Genomics policy is to not provide access to the underlying operating system to ensure the performance and security of the system are not inadvertently affected.

Request for deviation from this policy may be done in the Change Request section below.

1. Has the Firewall been configured to allow the following services? - see to Saphyr Networking and setup Guide (30251)		
a.	TeamViewer utilized <i>Note: customer activated. Control integrated within ICS kiosk mode</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No Comments
b.	Saphyr Assure	<input type="checkbox"/> Yes <input type="checkbox"/> No Comments
c.	Windows Update Service	<input type="checkbox"/> Yes <input type="checkbox"/> No Comments
2. Will you require a proxy server to be configured?		<input type="checkbox"/> Yes <input type="checkbox"/> No Comments
3.	Optional: If not utilizing DHCP, please provide networking parameters IP. Address, Gateway, Netmask, DSN servers	Comments

Bionano Access Server

The Bionano Access Server (BAS) will host the access software and data generated by the Saphyr instrument and the compute solution.

- A direct link between the Instrument controller and the BAS is required for data cohorts transfer purpose.
- A static IP is required for users to access the software from their workstation, and via their web browser.

Users won't have access to the Shell of the server. Bionano Genomics policy is to not provide access to the underlying operating system to ensure the performance and security of the system are not inadvertently affected. Request for deviation from this policy may be done in the Change Request section below

4. Please provide the following assigned address and DNS settings		Static IP	IP address
Subnet mask	Subnet mask	Gateway	Gateway
DNS 1	DNS 1	DNS 2	DNS 2
5. Has the Firewall been configured to allow the following services? - see to Saphyr Networking and Setup Guide (30251)			
a.	Remote access for Bionano Support personnel <i>Required for system updates and assistance with data analysis</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
b.	Bionano Access web hosted software accessibility from users' workstations	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
c.	Compute Servers – depends on system configuration	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
d.	Compute On Demand – depends on system configuration	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
6.	If COD, will you require a proxy server to access the compute solution? <i>Note: Only proxy configurations that do not require authentication credentials and with fixed IP are supported. Dual layer proxies are not supported.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
7.	Can you provide an SSL certificate? - key.pem and certificat.pem format	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
8.	Can you provide a DNS friendly name for the BAS' static IP <i>ex: bionanoaccess</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments

Compute Servers - optional (see Saphyr 30251 - Networking and setup Guide)			
9.	Will you require any help from Bionano Genomics personnel to rack and configure the Compute Server(s)? <i>If not, Data Center personnel will be required to rack, cable, and configure the Compute Servers.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
10.	Is one 1 Gbps+ Switch available with enough ports for compute servers cluster? <i>Note: 1 compute server needs 4(+1) ports.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
11.	Are Cat6+ network cables available for wiring the compute servers? <i>Note: 1 Saphyr Compute Server needs 4(+1) cables, 1 additional Bionano Compute Server needs 4 cables.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
12.	Please provide saphyr1a (master node) connection details	Static IP	IP Address
	Subnet mask	Subnet mask	Gateway
	DNS 1	DNS 1	DNS 2
13.	If cabling option B is chosen - Please provide the sequence of IP addresses for each of the remaining nodes. <i>Note: for option B, each compute server needs at least 4 static IP addresses</i>	Comments	

Change Request			
14.	Do you request Administrator Account(s) for Controller and Servers?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
15.	Please list below any operating system settings that may be modified. Bionano Genomics will review compatibility and provide you with an agreement. <i>For data integrity reasons, Bionano does not recommend modifying the operating system of its servers or computers. any unattended modification would break warranty and support.</i>		
	Comments		
16.	Please list all software that you intend to install. Bionano Genomics will review compatibility and provide you with an agreement. <i>For data integrity reasons, Bionano Genomics do not recommend modifying the operating system of its servers or computers. Any unattended modification would break warranty and support.</i>		
	Comments		

References	
<i>Reference documents are available on our bionano.com website, or upon request</i>	
A.	Bionano Genomics Site Preparation Guide (30145) Information related to Saphyr System setup
B.	Saphyr Networking and Setup Guide (30251) Information related to IT and Networking setup
C.	Bionano Genomics Data Security Guidelines (30292) Genomic data security related document
D.	Bionano Genomics Data Collection Guidelines (30173) Generated data and their weight
E.	Saphyr System Installation, Laboratory Checklist (30614) Laboratory installation checklist

Additional comments
Comments

Acknowledgment		
<p><i>I acknowledge full responsibility for backing up generated data from the Bionano Access Server regularly.</i></p> <p><i>I have read the Instrument Controller and BAS sections in the Bionano Genomics Data Security Guidelines document and understand that modifications made to any of the operating systems or configuration may result in degradation in performance or failure of the instrument. Any failure caused by unauthorized modification will not be covered by the Saphyr warranty or service contract.</i></p> <p><i>I understand that no changes should be made before Bionano Genomics support follows up with this request.</i></p>	Date	Date
	Name	Name
	Title	Title
	Signature	