

Product Information

**ZEISS Predictive Service**Discover how you benefit from our Remote Service Program



## Remain at peak level of performance

- In Brief
- The System
- Advantages
- Service

ZEISS Predictive Service enables you to benefit from permanent and sustained evaluations of the health system of your ZEISS microscope without the need of additional hardware. This program helps to diagnose possible issues much faster and enables rapid service actions to remove challenges that could hinder your workflow.

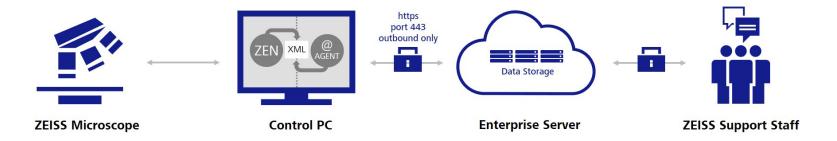
Ensure highest data security standards using well-established technologies like PTC ThingWorx and Microsoft Azure Cloud, which are certified according to various international standards.

ZEISS remote service program ensures data privacy and only authorizes qualified ZEISS experts to view relevant technical data of your system.

Maintain the currently supported systems at peak level of performance with the help of ZEISS Predictive Service:

Axio Scan.Z1, Cell Discoverer 7, Lattice Lightsheet 7, LM microscope stands (Axio Observer, Axio Imager 2, Axio Examiner),

LSM 800, LSM 900, LSM 980, Smartzoom 5, Visioner 1, Crossbeam series, EVO series, GeminiSEM series, MERLIN series, Sigma series, Xradia Versa series.



## **Connectivity & condition monitoring**

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The ZEISS Predictive Service system is comprised of two major components: the Predictive Service agent software running on the PC of your instrument and the ZEISS enterprise server. The agent software monitors the ZEISS instruments regularly, checking the status of key system parameters and log files that provide a picture of system health and configuration. In case of changes in parameters and log files, the agent establishes an outbound connection with the enterprise server to provide ZEISS the latest status of your microscope system.

If a problem occurs on your microscope system, you can contact the ZEISS service team or ZEISS will contact you proactively if an action is required based in case of a detected issue. ZEISS support engineers will then diagnose the issue by analyzing data on the Enterprise Server – remotely and without interruption to your operation. When over the shoulder assistance is required, remote desktop sharing can, with your permission, be initiated quickly and securely using best-in-class TeamViewer software.

Once diagnosed, the problem may then be corrected quickly, as in the case of a necessary software update or another configuration adjustment. If a service engineer needs to be sent to your site to repair the problem, ZEISS Predictive Service helps ensure that they arrive on-site with the necessary parts and expertise to resolve the issue.

Monitor your system's health status

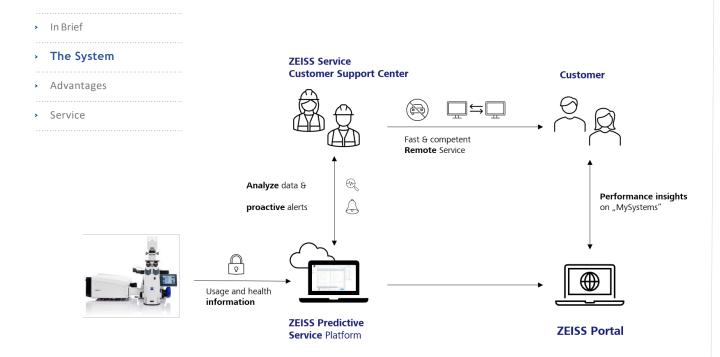
Analyze relevant data in case of an issue



Connect with the ZEISS enterprise server

Solve issues remotely and without an interruption

### **Remote service program - system**



#### Monitor

The agent connects with the ZEISS enterprise server at predictive-service.zeiss.com, using end-to-end-encryption.

This interaction is only outgoing from agent to enterprise server.

The agent will not open any inbound connection requests, avoiding a typical attack vector. During the connection, the health system of your microscope will be monitored permanently.

#### Analyze

The agent shares the specified data that are necessary to monitor the instrument health status. ZEISS enterprise server is only able to request data over an established secure connection. The ZEISS Service will receive alerts in case of a severe issue of your monitored microscope and get in contact with you. During service calls ZEISS Service can further analyze the issue remotely using collected data.

#### Connect

All relevant data is collected by the system operating software of the instrument and saved to separate log files. Whenever new data is stored, the agent transmits the data to the enterprise server. Trained and authorized ZEISS staff can now log in and view your transmitted data. You also have the opportunity to get performance insights of your microscope provided by Predictive Service in your ZEISS Portal.

#### Solve

The remote service option enables a comfortable and quick connection to the ZEISS personnel and enables the reestablishment of your peak performance without the need of an onsite visit by the ZEISS Service team.

### **Enhanced & secure remote diagnosis**

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#### **Secure connectivity**

While analyzing the health system of your ZEISS microscope, ZEISS offers you the highest data security. The communication between ZEISS enterprise server and agent follows the secure WebSocket Standard. There will be an initializing phase where the agent establishes a secure connection to the enterprise server over HTTPS. Every data transfer requires an established communication channel, which is always initiated by the agent. Consequently, the enterprise server can only request data over an established secure connection. Once the connection has been stabilized it will be maintained until a connection loss requires establishing a new connection.



### **Privacy**

Error recovery and condition monitoring requires data like device identity, which includes in general operating hours, movement cycles of motorized components or error messages combined with the Windows Management Instrumentation (e.g. version of the operating system, series number or disk usage), to filter out issues. Meanwhile, ZEISS affirms you that only relevant and necessary technical data, stored in the Microsoft Azure Cloud, will be visible. To maintain a high level of data privacy and to comply with data safety regulations, all privacy related data is always anonymized.



## **Maximum uptime for your Microscope System**

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### Fast and competent support

The advanced ZEISS remote service program can be upgraded in a simple setup.

Predictive Service is permanently monitoring your microscopes health status so that issues can be diagnosed and reported quickly.

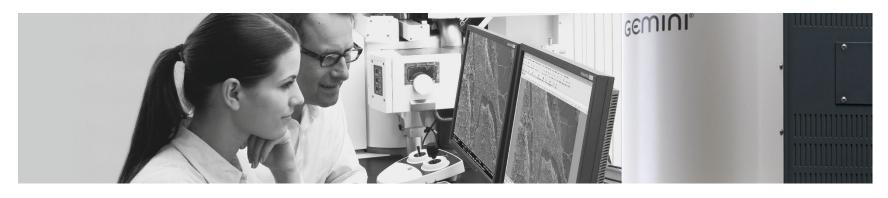
When over the shoulder assistance is required, TeamViewer remote desktop sharing software provides the ability to share your desktop with ZEISS experts. Only qualified and authorized personnel is able to view your data.

### Maintain highest system availability

ZEISS priority is to plan necessary actions in time to prevent issues and help you to remain at peak levels of performance. With Predictive Service, it becomes feasible to diagnose any issues with your microscope much faster thanks to the continuous support of the highly qualified ZEISS engineers. High security standards guarantee no unauthorized access to your system performance data and keep your microscope constantly at the highest possible level of performance.

#### **Optimum instrument performance**

Once connected to your network, Predictive Service automatically tracks the health system of your ZEISS microscope and can evaluate its performance in real-time. This background process will not influence your workflow at all. Fast actions to fix problems right away become possible through the established technology of PTC ThingWorx, using Microsoft Azure Cloud infrastructure, certified and audited according to international standards.



### Count on Service in the true sense of the word

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Because the ZEISS microscope system is one of your most important tools, we make sure it is always ready to perform. What's more, we'll see to it that you are employing all the options that get the best from your microscope. You can choose from a range of service products, each delivered by highly qualified ZEISS specialists who will support you long beyond the purchase of your system. Our aim is to enable you to experience those special moments that inspire your work.

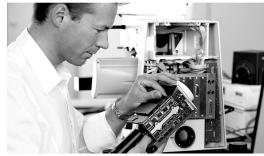
#### Repair. Maintain. Optimize.

Attain maximum uptime with your microscope. A ZEISS Protect Service Agreement lets you budget for operating costs, all the while reducing costly downtime and achieving the best results through the improved performance of your system. Choose from service agreements designed to give you a range of options and control levels. We'll work with you to select the service program that addresses your system needs and usage requirements, in line with your organization's standard practices. Our service on-demand also brings you distinct advantages. ZEISS service staff will analyze issues at hand and resolve them – whether using remote maintenance software or working on site.

### **Enhance Your Microscope System.**

Your ZEISS microscope system is designed for a variety of updates: open interfaces allow you to maintain a high technological level at all times. As a result you'll work more efficiently now, while extending the productive lifetime of your microscope as new update possibilities come on stream.







Profit from the optimized performance of your microscope system with services from ZEISS – now and for years to come.

## **Protect Service Agreements**

# Choose the ZEISS Service Agreement that matches your service requirements

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Choose one of the ZEISS Protect Service Agreements to maintain your instrument's performance and expand your system's uptime. Besides your Protect Service Agreement adopt ZEISS Predictive Service as an excellent complement and focus on the essentials, safely knowing that your microscope system is protected.

	Protect preventive	Protect advanced	Protect advanced plus*	Protect premium	Protect premium plus*
Preventive maintenance	<b>✓</b>	<b>✓</b>	~	<b>✓</b>	~
Highest priority for your service call	<b>✓</b>	~	~	~	~
Repair: coverage of labor and travel		~	~	~	~
Repair: coverage of spare parts				~	~
Remote diagnostics, service and support			~		~

<sup>\*</sup> advanced plus and premium plus require a connected instrument











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