



Polarion Software®
CONCEPT

Recommendations and Checkpoints for

Rollouts at Large Enterprises

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Preface

The Polaron ALM (Polarion REQUIREMENTS, Polaron QA) architecture is designed to fulfill the needs of enterprise customers. External factors may affect some aspects of Polaron functionality, such as the connectivity of the web-based implementation, concurrency of activities on the server, and so forth.

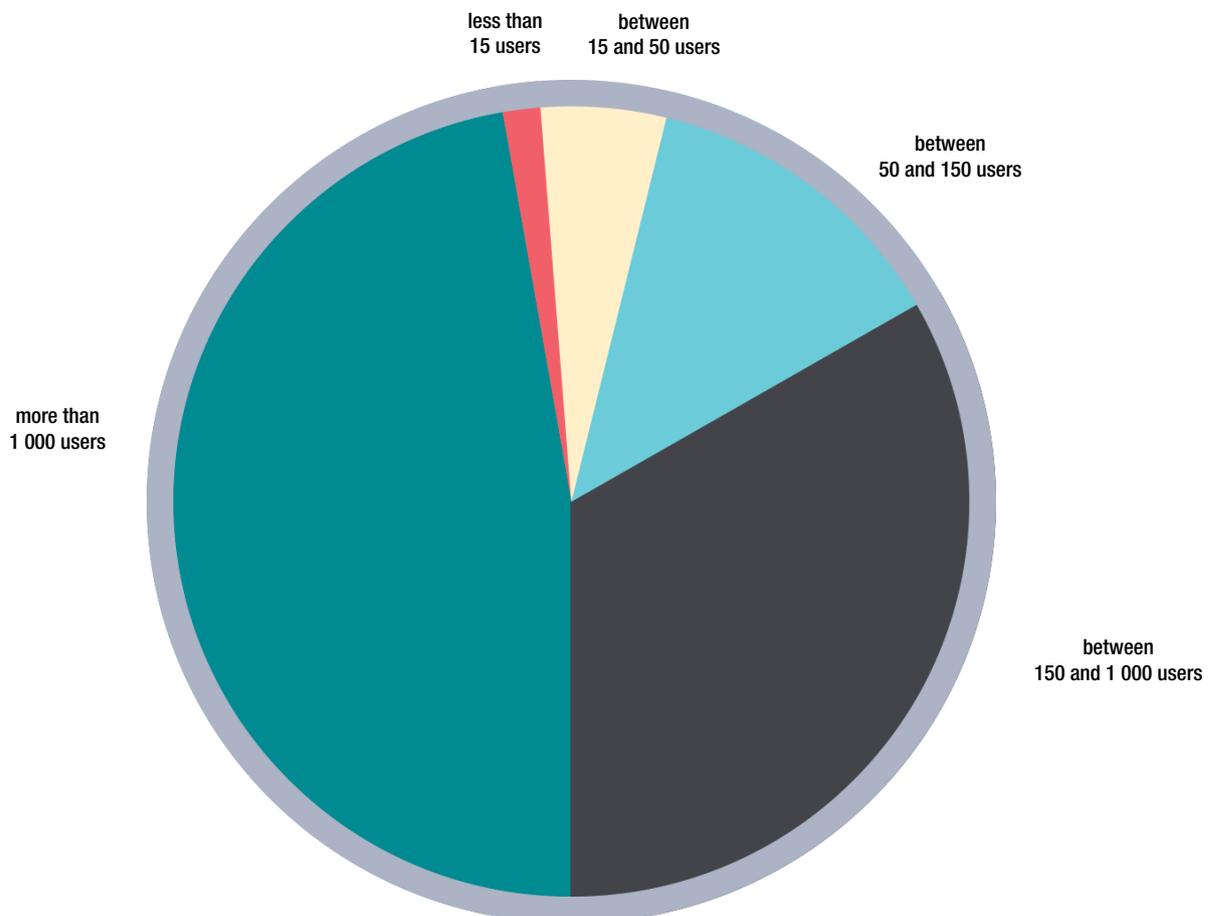
The goal of this document is to show the principal proposition of how Polaron could be set-up in the environment of

- Enterprise Customers
- Distributed Organizations (incl. Development, Analytical, QA and other Centers)
- A large amount of projects
- A large amount of project artifacts

Reference Implementations

While it is often presumed that the architecture and design of a software application provides good response time in the specified above environment and is confirmed by internal tests, physical proof with real data (tests are often made with synthetically/generated objects) gives prospects a better chance to compare similarities in the environment with an existing customer in the branch and rely on the success of others.

Nearly 50% of Polaron users are working for companies who have ordered more than 500 licenses, a comparably large portion based on the 150,000 users working worldwide with Polaron commercial licenses (3.5 mil users use our Open Source components).



Example implementations

The following companies are examples from our diverse customer list, chosen by different highlights of their implementations:

T - Systems - **T-Systems** - T-Systems shapes the networked future of business and society and creates value for customers, employees and investors thanks to innovative ICT solutions.

- 4000 Users distributed on 4 Servers
- Distribution all over the world like Germany, Brazil, India
- ALM for CMMI Level 3



Reale Mutua - Reale Mutua is one of the biggest Italian insurance companies

- 2600 Users
- Bug tracking



Medtronic - Medtronic is the world's largest medical technology company, offering unprecedented breadth and depth of innovative therapies to fulfill our Mission of alleviating pain, restoring health, and extending life

- 1500 Users
- ALM for medical development based on FDA

DAIMLER



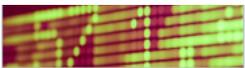
Daimler - Mercedes Benz Car Group - The Daimler Group is one of the biggest producers of premium cars and the world's biggest manufacturer of commercial vehicles with a global reach

- 900 Users
- Central Server for Germany, USA, India, Japan, China (24h usage)
- ALM with ISO 26262 conformity



Lombardia Informatica - As an IT partner of Regione Lombardia, Lombardia Informatica designs and implements ICT Systems for the Regional Government and represents the unique interface between Regione Lombardia and the marketplace.

- 1800 Users
- ALM
- Government and Healthcare



Major Swiss Bank - Major Swiss Bank is a leading financial services company, advising clients in all aspects of finance across the globe and around the clock.

- 1500 Users
- Requirements with rich environment to connect
- [Success Story](#)



Garmin - Garmin is an enduring company by creating superior products for automotive, aviation, marine, outdoor, and sports that are an essential part of our customers' lives.

- 800 Users
- Central Server located in Germany
- Requirements

General Installation Dimensions

Expectations of a customer to be able to manage in their organization:

- Amount of Projects- up to several thousands
- Amount of Work Items or other type of structured artifacts- up to several millions
- Amount of project stakeholders- up to several thousands

Proof of Polarion's architecture

Polarion R&D (Research and Development) together with PSO (Professional Services Organization), PM (Product Management) and Sales departments identified the following acceptance criteria for the different enterprise sizes:

Single Server supports up to

- 1 mil Work Items or other structured artifact types
- 15,000 Registered users
- 500 Projects with support of full-traceability, versioning and baselining
- 200 active parallel sessions
- 100 external development SVN or Git repositories (possible to connect externally hosted repositories)

Multi-instance Server (Polarion is distributed across several servers in a single domain/network)

- Single/unified License management
- 10 server nodes working in parallel
- 10 mil Work Items
- 15,000 Registered users
- 5,000 Projects (projects are fully traceable on each node, but only 1-level of traceability between projects on different nodes)
- 1500 active parallel sessions distributed over multi instance
- 1000 external development SVN or Git repositories

Geographically distributed Servers

- Separated license management (users from one location need a license on another server, when they need access)
- Unlimited amount of servers working in parallel
- For each node, the same constraints applied as for the Single Server
- Traceability between servers is possible for 1-level, additional authentication to follow traceability on "external" server is required

Recommended Setup

For each Polarion node described in the chapter above, following hardware recommendations apply.

Please note that you may combine servers with different hardware in a Multi-Instance or Geographically distributed environment, according to the load of each node (e.g. by amount of projects, users, etc.)

	XS	S	M	L	XL
Operating System	32 or 64-bit	64-bit	64-bit	64-bit	64-bit
CPU Cores	4	8	8	16	32
GB RAM (dedicated to Polarion)	8 (4)	16 (8)	32 (16)	64 (32)	128 (64)
Storage for Polarion	250GB+	500GB+	1TB+ (SCSi or similar)	1TB+ (RAID 10, NAS, SAN)	1TB+ (RAID 10, NAS, SAN)
# Projects	< 100	> 100	> 300	> 500	> 500
# Users	< 50	< 150	> 150	> 300	> 1000

About Polarion Software



Polarion Software's success is best described by the hundreds of Global 1000 companies and over 1 Million users who rely daily on Polarion's Requirements Management, Quality Assurance, and Application Lifecycle Management solutions. Polarion is a thriving international company with offices across Europe and North America, and a wide ecosystem of partners world-wide. For more information, visit www.polarion.com.

