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Get More Done with BigFix

BigFix Scale & Performance - A High Level Understanding

Casey Michael Cannady
Enterprise Architect
BigFix Professional Services

HCL BigFix

Building Long Term Success with BigFix

Find the resources and community you need to make your journey with BigFix a success!

Social Media
Engage with other BigFixers

- BigFix Forum
- BigFix Slack
- BigFix on LinkedIn
- BigFix on Twitter
- BigFix on Facebook
- BigFix on Reddit

Learning
Deepen your BigFix knowledge

- BigFix Training
- BigFix Professional Certification
- BigFix YouTube Channel
- BigFix Webinars
- BigFix Days User Conferences
- Endpoint Management Today Podcast
- BigFix Newsletter

Resources
Discover resources for BigFix – procedure documents, code, settings and more

- BigFix Documentation
- BigFix Wiki
- BigFix.me Community Content
- BigFix Developer Information Repository
- BigFix Data Sheets and White Papers
- BigFix Ideas Portal

Consultation and 1:1 Help
Engage with BigFix experts

- BigFix Support Portal
- BigFix Professional Services
- Client Advocacy

We'll get started in about 3 minutes…

Ask questions throughout the event…

While you wait, bookmark this site to find all things BigFix related

Join us for these upcoming webinars and events…

11-October

BigFix Briefing Room – What's New in October

19-October

Get More Done with BigFix – Your Questions Answered in Real Time

Find more webinars at our website at
https://www.hcl-software.com/about/events

Endpoint Management Today: The BigFix Podcast

Also, on Apple Podcast, Spotify, etc. and you can ask your smart speaker (Alexa, Siri) to play the podcast as well

Episode 34 – BigFix Best Practice Series: Client Settings 101 - Client Settings & Why You Should Care About Them

Episode 35 – BigFix Best Practice Series: Client Settings 201 – Managing Client Settings Effectively

Episode 36 – BigFix Best Practice Series: Client Settings 301 – Client Settings 301 – Business Use Cases Where You Just Need More

Episode 37 – BigFix Product Launch: BigFix User Workspace

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HCL BIGFIX PODCAST
NEW EPISODE LIVE TODAY!
Hear from technical experts, customers, thought leaders and more as we bring you new episodes each month.

BigFix – THE Endpoint Management Platform

Tune In Now

HCL BigFix

Upcoming Training

Events from Oct 5th

Wed Oct 4th 9:00am - Thu 5th 5:00pm

Inventory 201 - Rome

Instructor: Marcin Spychala TimeZone: Rome Ticket sale starts: 08/20/2023 Ticket sale ends: 09/30/2023

Inventory ● besfnd201i ● bigfix ● enablement

Wed Oct 4th 9:00am - Thu 5th 5:00pm

Relevance 401 - New York

Instructor: Ken Vendler TimeZone: New York Ticket sale starts: 08/20/2023 Ticket sale ends: 09/30/2023

Relevance ● besfnd401r

Mon Oct 9th 9:00am - Thu 12th 5:00pm

BigFix 101 - Chicago

Instructor: Dale Jester TimeZone: Chicago Ticket sale starts: 08/25/2023 Ticket sale ends: 10/05/2023

foundation ● besfnd101

Tue Oct 10th 9:00am - Fri 13th 5:00pm

BigFix 101 - Mumbai

Instructor: Chandrashekar Ande TimeZone: Mumbai Ticket sale starts: 08/26/2023 Ticket sale ends: 10/06/2023

foundation ● besfnd101

Mon Oct 16th 9:00am - Thu 19th 5:00pm

BigFix 101 - Rome

Instructor: Camille Proux TimeZone: Rome Ticket sale starts: 09/01/2023 Ticket sale ends: 10/12/2023

foundation ● besfnd101

Tue Oct 17th 9:00am - Wed 18th 5:00pm

Relevance 401 - Melbourne

Instructor: Swapnil Rakhade TimeZone: Melbourne Ticket sale starts: 09/02/2023 Ticket sale ends: 10/13/2023

Relevance ● besfnd401r

Wed Oct 18th 9:00am - Thu 19th 5:00pm

Compliance 301 - Chicago

Instructor: Dale Jester TimeZone: Chicago Ticket sale starts: 09/03/2023 Ticket sale ends: 10/14/2023

Compliance ● besfnd301c

Mon Oct 23rd 9:00am - Thu 26th 5:00pm

BigFix 101 - New York

Instructor: Riyaz Papabaigari TimeZone: New York Ticket sale starts: 09/08/2023 Ticket sale ends: 10/19/2023

foundation ● besfnd101

Tue Oct 24th 9:00am - Wed 25th 5:00pm

Relevance 401 - Rome

Instructor: Marcin Spychala TimeZone: Rome Ticket sale starts: 09/09/2023 Ticket sale ends: 10/20/2023

Relevance ● besfnd401r

Wed Oct 25th 9:00am - Fri 27th 5:00pm

OS Deployment 302O - Singapore

Instructor: Swapnil Rakhade TimeZone: Singapore Ticket sale starts: 09/10/2023 Ticket sale ends: 10/21/2023

OSD ● besfnd302o

Wed Nov 1st 9:00am - Thu 2nd 5:00pm

Inventory 201 - New York

Instructor: Daniel Mitchell TimeZone: New York Ticket sale starts: 09/17/2023 Ticket sale ends: 10/27/2023

Inventory ● besfnd201i ● bigfix ● enablement

Mon Nov 6th 9:00am - Thu 9th 5:00pm

BigFix 101 - Rome

Instructor: Srijay Jayapalan TimeZone: Rome Ticket sale starts: 09/22/2023 Ticket sale ends: 11/02/2023

foundation ● besfnd101

On Your Mark.. Get BigFix Certified!

The Wait is OVER.
The HCLSoftware Academy Certification Program is Here!

The **HCLSoftware Certified BigFix Platform 10 Professional** must demonstration knowledge, skills, and abilities necessary to perform planning, installation, upgrade, configuration, management, operations, performance tuning and troubleshooting on HCL BigFix platform v10.x.

Check out all of the details, Exam Guide, preparation links, and how you can schedule to take your Certification Exam!

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In Person User Groups – Happening Today, More Coming!

BIGFIX WEST COAST USER GROUP
The BigFix Escape Room returns!
Activities and games
Live product demos
Advance your BigFix skills
October 5, 2023
8:30 AM - 4:30 PM
Space is Limited - Reserve NOW!

BIGFIX EAST COAST USER GROUP
The BigFix Escape Room returns!
Activities and games
Live product demos
Advance your BigFix skills
October 12, 2023
8:30 AM - 4:30 PM
Space is Limited - Reserve NOW!

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Your Presenters…

Rhonda Studnick Kaiser

Director of Customer Experience, BigFix

John Talbert

Director, BigFix Professional Services

Casey Michael Cannady

Enterprise Architect, BigFix Professional Services

HCL BigFix

About Casey Cannady…

Joined HCLTech in September of 2018

Previously worked for IBM Business Partner as BigFix Architect

Previously worked for Kroger Technology as BigFix Admin & SME

Known as the giant *(6' 5" tall & size 14w shoes)* who lives in a tiny home…

… OR "that guy with the BigFix tattoo"

BigFix Scale & Performance | Key Factors

An overview of BigFix capacity planning for mid-size and larger Enterprises.

Offers management & other best practices to achieve a well performing installation that demonstrates service stability. This will include the deployment of the BigFix management servers into cloud, or virtual, environments.

Capacity planning for virtual environments typically involves the specification of sufficient physical resources to provide the illusion of unconstrained resources in an environment that may be characterized by highly variable demand.

REF | BigFix Capacity Planning v10 Guide

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BigFix Scale & Performance | MXCapacity Tool Demo


```
Command Prompt                                            —    □    ×

C:\BESTools>MXCapacity.exe --help
usage: MXCapacity.exe [-h] [--endpoints ENDPOINTS] [--concusers CONCUSERS]
                      [--service {root,dbms,relays,webui,webreports,pluginportal} [{root,dbms,relays,webui,webreports,pl
uginportal} ...]]
                      [--platform {linux,windows}]
                      [--relayscale {normal,high}] [--mle] [--dump]
                      [--format {table,csv,json}]

BigFix Capacity Planning

optional arguments:
  -h, --help            show this help message and exit
  --endpoints ENDPOINTS, -e ENDPOINTS
                        The number of endpoints to provide the sizing for
                        (default=10000).
  --concusers CONCUSERS, -c CONCUSERS
                        The number of *concurrent* users expected for user
                        interface services (default=10).
  --service {root,dbms,relays,webui,webreports,pluginportal} [{root,dbms,relays,webui,webreports,pluginportal} ...], -s
{root,dbms,relays,webui,webreports,pluginportal} [{root,dbms,relays,webui,webreports,pluginportal} ...]
                        The service to provide the capacity results for
                        (default=root).
  --platform {linux,windows}, -p {linux,windows}
                        The platform to provide the capacity results for
                        (default=environment where this program is running).
  --relayscale {normal,high}, -r {normal,high}
                        Deploy a normal scale or a high scale relay
                        (default=high).
  --mle, -m             Have the relay sizing account for Message Level
                        Encryption (MLE) (default=false).
  --dump, -d            Dump the capacity planning tables used by the utility.
                        This overrides all other options.
  --format {table,csv,json}, -f {table,csv,json}
                        The format to use to display the results
                                              (default=table).

C:\BESTools>_
```

REF | https://bigfix-mark.github.io/

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BigFix Scale & Performance | Virtual Environments

This is a diagram providing a very basic view of the BigFix solution architecture.

In order to properly manage capacity, some base definitions must be understood. Adhering to these definitions is critical to the accuracy of the results.

Several complex capacity planning tables are provided. These tables constitute the reference content for BigFix. However, a set of performance and capacity planning tools are provided to greatly simplify the capacity planning experience.
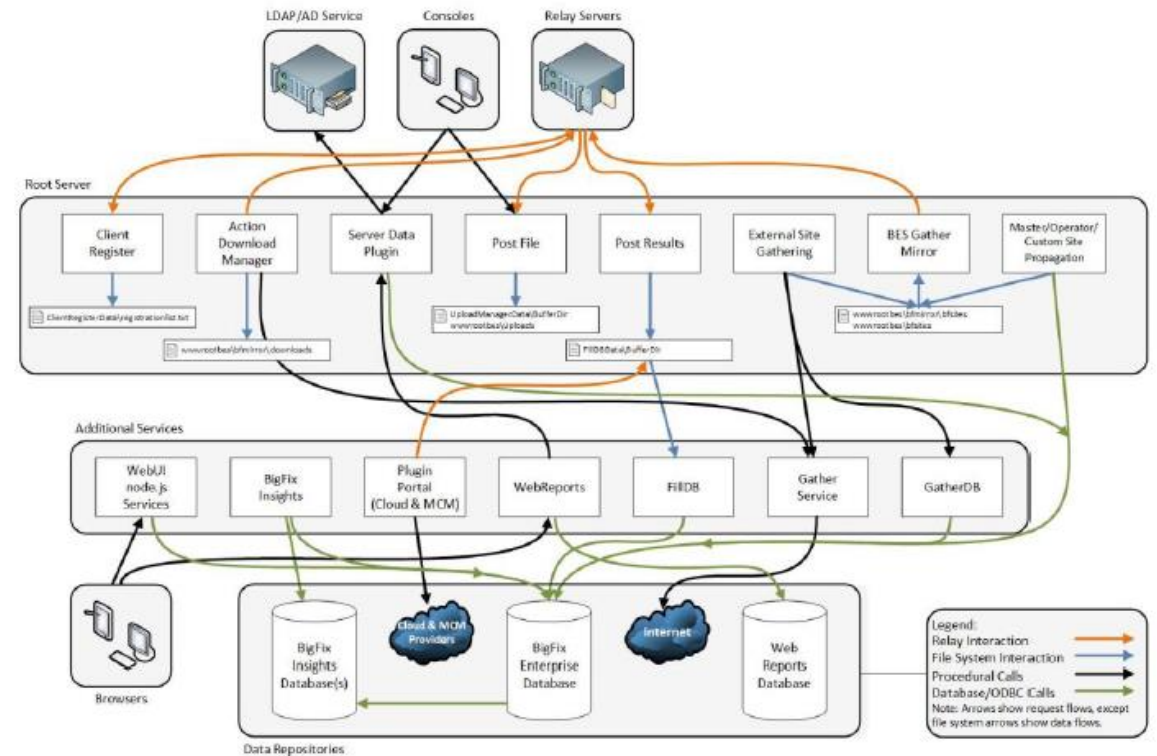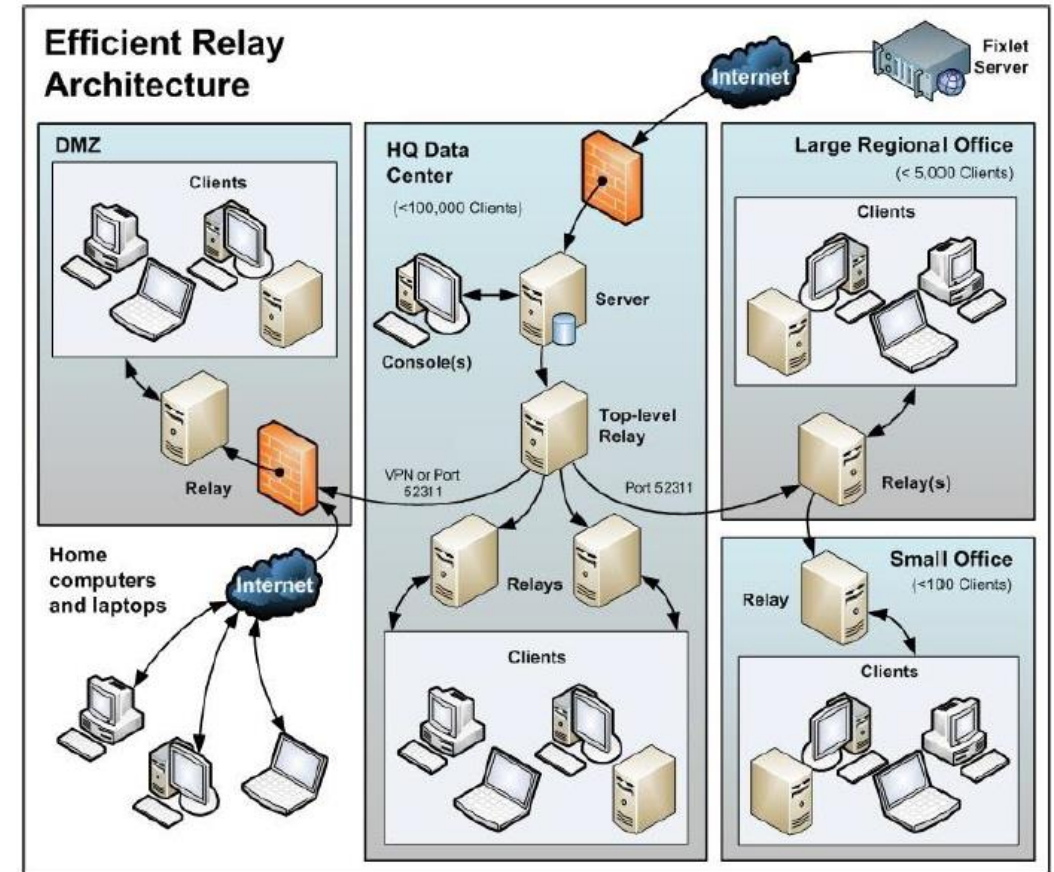

REF | BigFix Capacity Planning v10 Guide

BigFix Scale & Performance | Network Topology

This is a diagram providing a very basic deployment scenario for the BigFix relay and agent infrastructure.

BigFix relays are typically deployed in a hierarchy with top level relays serving other relays, and the leaf node relays *(often referred to as site level relays)* serving the endpoints.

In terms of capacity planning, we will describe the infrastructure requirements, and then break down the discussion in terms of top-level relays and leaf node relays.

REF | BigFix Capacity Planning v10 Guide

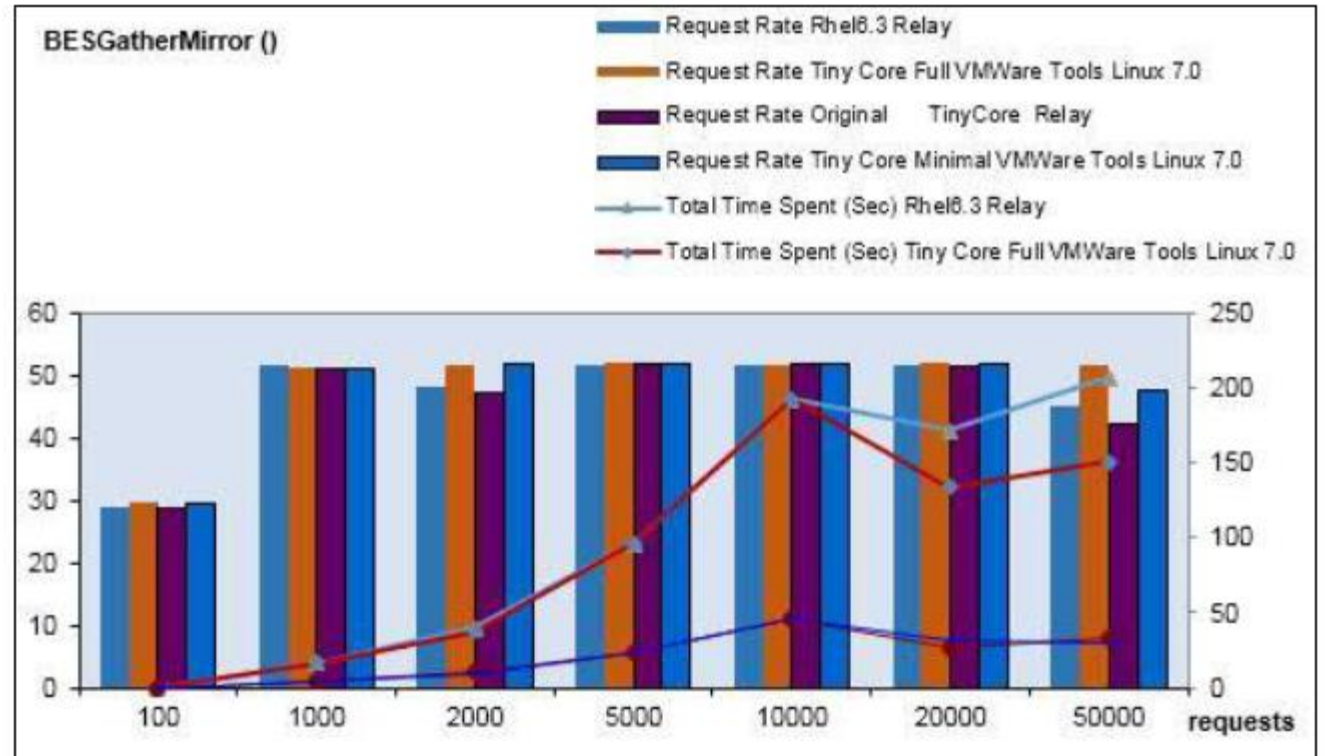# BigFix Scale & Performance | IOps, RAID, RDBMS, Services & Storage

Capacity planning & performance management go hand in hand **PLUS** there is no standard workload for BigFix. This is because every enterprise has different requirements, infrastructure, and customizations.

The base capacity planning recommendations offer a set of defined decision points for building an optimal BigFix deployment based on the business needs.

Any management & configuration recommendations for BigFix services in addition to the underlying databases, operating system, and hypervisor configurations should all be evaluated regularly.

REF | BigFix Capacity Planning v10 Guide

Legend:
- Request Rate Rhel6.3 Relay
- Request Rate Tiny Core Full VMWare Tools Linux 7.0
- Request Rate Original   TinyCore Relay
- Request Rate Tiny Core Minimal VMWare Tools Linux 7.0
- Total Time Spent (Sec) Rhel6.3 Relay
- Total Time Spent (Sec) Tiny Core Full VMWare Tools Linux 7.0

BESGatherMirror ()

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BigFix Scale & Performance | Evolution & Power of Scale

BigFix scale has evolved rapidly over the last decade! In the early days of BigFix, managing 10,000 computers would be a large deployment.

Today, BigFix supports millions of endpoints across the globe. An individual server instance can manage 300,000 computers, with multi-instance deployments possible.

In terms of how these computers are managed, historically all computers required an agent. However, with the BigFix 10 release, cloud and mobile devices are also supported.
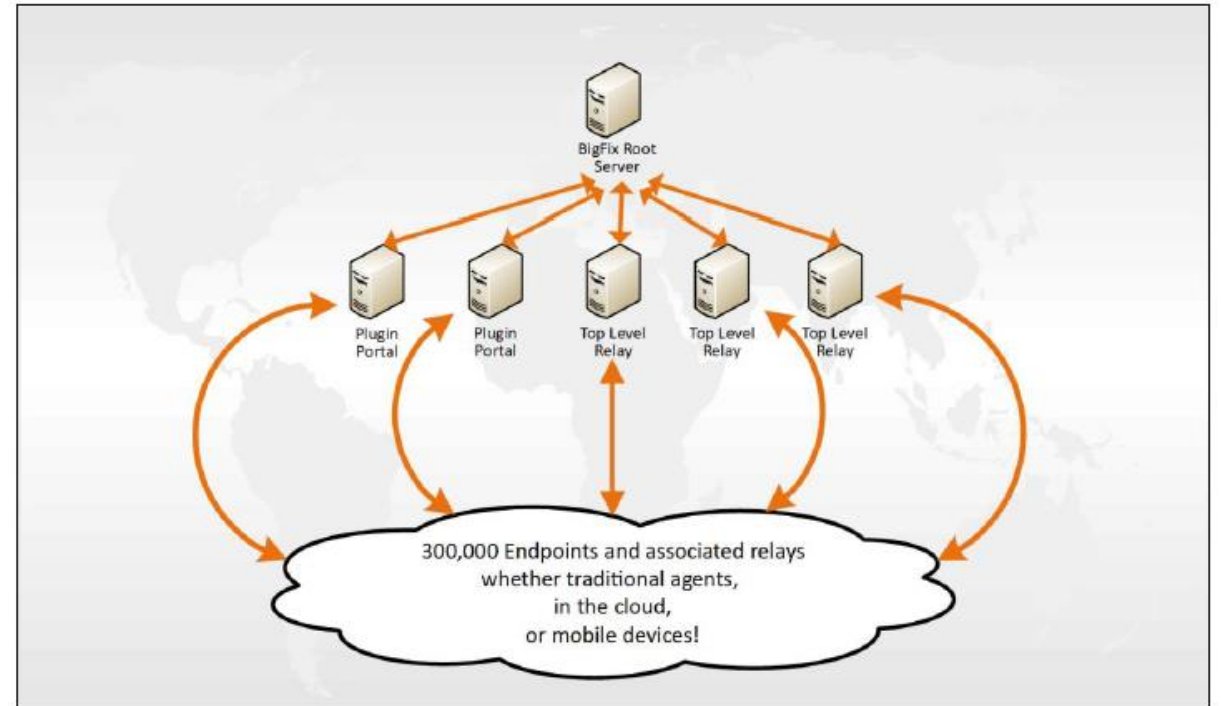
REF | BigFix Performance Blog v1

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BigFix Scale & Performance | Resources

The BigFix Performance & Security Engineering team at HCLSoftware provides the following guides and other resources to all customers.

- ❖ BigFix Capacity Planning

- ❖ BigFix Maintenance Guide

- ❖ BigFix Network Topology Diagrams

- ❖ BigFix NFRs - A Checklist Approach

- ❖ MX Performance Toolkit for BigFix

- ❖ BES Forum - Usage & Config - Platform

Please contact your Technical Advisor for additional information or an engagement.

REF | https://bigfix-mark.github.io/

BigFix Performance & Capacity Planning Resources

BigFix: Find and fix all endpoints… fast!

tar.gz .zip

B BIGFIX

BigFix is a highly scalable and powerful product.

The following resources are provided by to simplify the deployment

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Thank You

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