

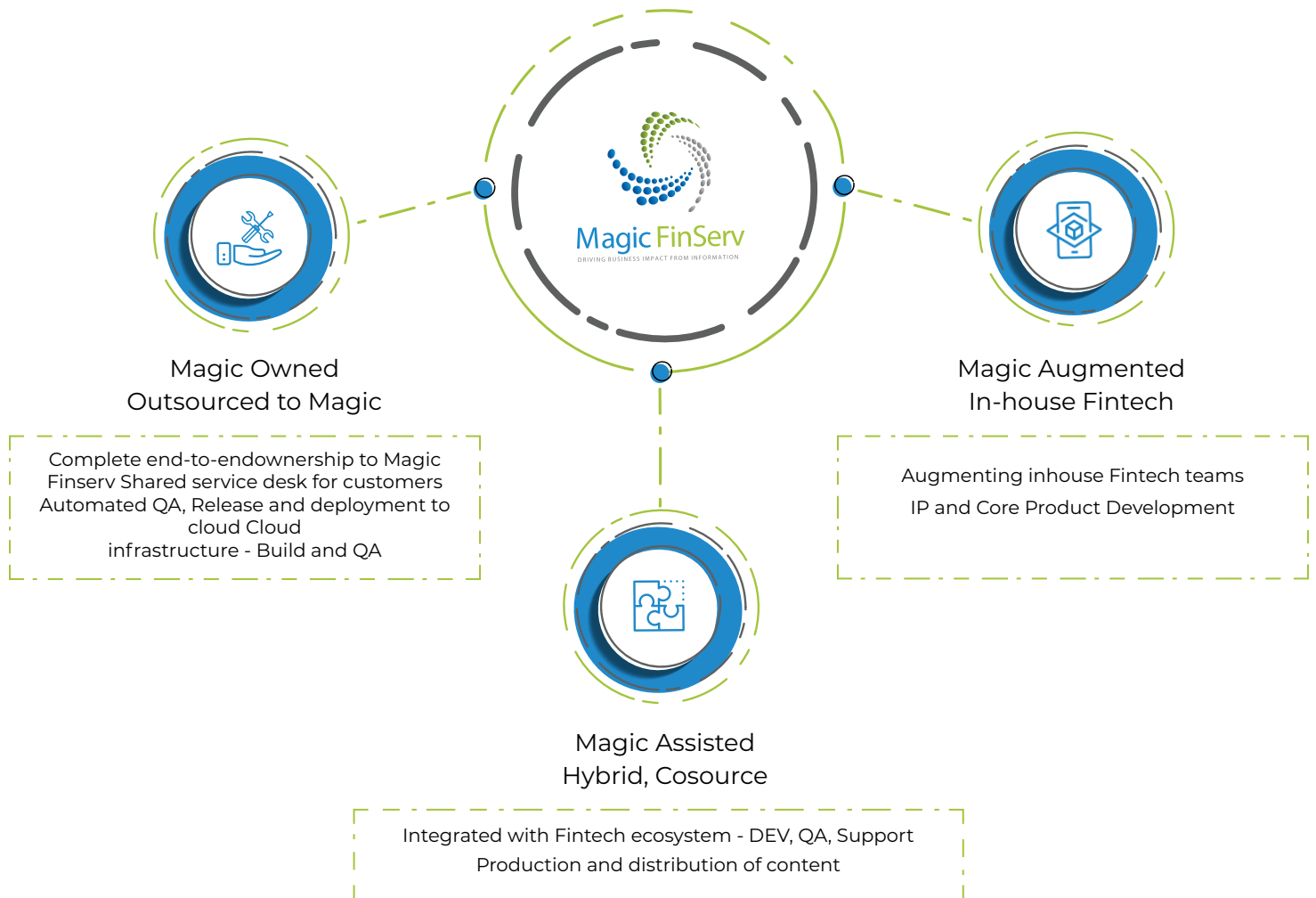
Technology Accelerator Services

Improve Time and Cost to Market
with Innovative Technologies



Magic FinServ's Fintech Accelerator Program leverages its in-depth knowledge of Capital Markets domain and its expertise in new-gen technologies to help Fintechs modernize their platforms and meet emerging market needs.

Customized Operating Model for Financial Customers



Outsource

Choose from onsite or offshore options for better performance of all technical services with front to back processes ownership and accountability of Magic FinServ. Ideally suited for non-strategic and non-core tasks.

Hybrid/ Co-Source

Engage as a strategic vendor and operate teams from FinServ in joint services model with shared ownership and accountability of Magic FinServ. Ideally suited for core non-strategic tasks.

Augmented

Identify specific resources from Magic FinServ deployed within Fintech teams to enhance skills and domain expertise for your organisations. Ideally suited for core strategic tasks specially where IP is involved.

Advisory Services

Leverages capital markets domain and understanding of business rules to create foundation for game changing digital transformation.

DevOps and Automation

Leverages Magic's proprietary automation fabric framework to build frictionless CI/CD and automated testing pipelines, using custom or open-source tools; thus enhancing time to market

Cloud Migration & Management

SaaS enablement of Fintech and custom IT platforms, best practice driven migration to cloud leveraging native properties of Azure, AWS, GCP.

Production Support

Proactive SLA driven support / maintenance of applications, environments, and infrastructure (cloud) to ensure scalability, stability, and availability.

Quality Engineering

Magic FinServ performs comprehensive Functional, Performance Load, Security and User Acceptance Testing for our clients. We offer unique frameworks to build automation pipelines using custom solutions as well as industry standard tools like Selenium and Cypress.

Platform Engineering & Integration

Leverages next-gen & cloud native technologies, including Python, Node.js, Angular etc., building on inputs from advisory services to build, implement and modernize fintech platforms. Also, build and manage APIs, custom interfaces, data feeds in an automated manner to achieve seamless integration between OnPrem and Cloud.

AI/ML Driven User Experience

Leverage DeepSight™, a Magic FinServ platform with AI/ML and RPA at its heart, to automate and integrate last mile business processes for improved user experience and enhanced benefits realization.

Operations

Optimize productivity of operations by automating the acquisition, consumption and distribution of data. Fintechs can choose from our flexible operating and engagement models which fits best for your organisation along with the services offered by Magic FinServ.





Business Challenges/Requirements

- Startup culture with Zero Documentation
- Setting up the QA, Agile process from scratch including R&D on tool selection
- Test Automation from Day 1, keeping in mind the frequent changes in the application, integrating it with CI/CD
- Scaling up the team for Cloud, Performance, Security and Usability testing

Technology Landscape

- JIRA for Issue and task management | XRAY for Test management
- Test Automation using Java, Selenium webdriver, TestNG, GitHub, Maven
- Reporting using Extent Reports | CICD using GitLab
- Performance Testing using Blazemeter, Jmeter



Solution Highlights

- Implemented various best practices, processes to streamline the SDLC cycle - setting up workflows and defining Scrum guidelines
- Improved documentation by helping the POs/BAs, and defining goals/ acceptance criteria
- Automated Tests, CICD branching strategy for faster go to market
- Cloud testing to help achieve High availability, DR testing, Failover testing
- Performance testing to improve user experience, Load, Stress testin for benchmarking

Outcomes

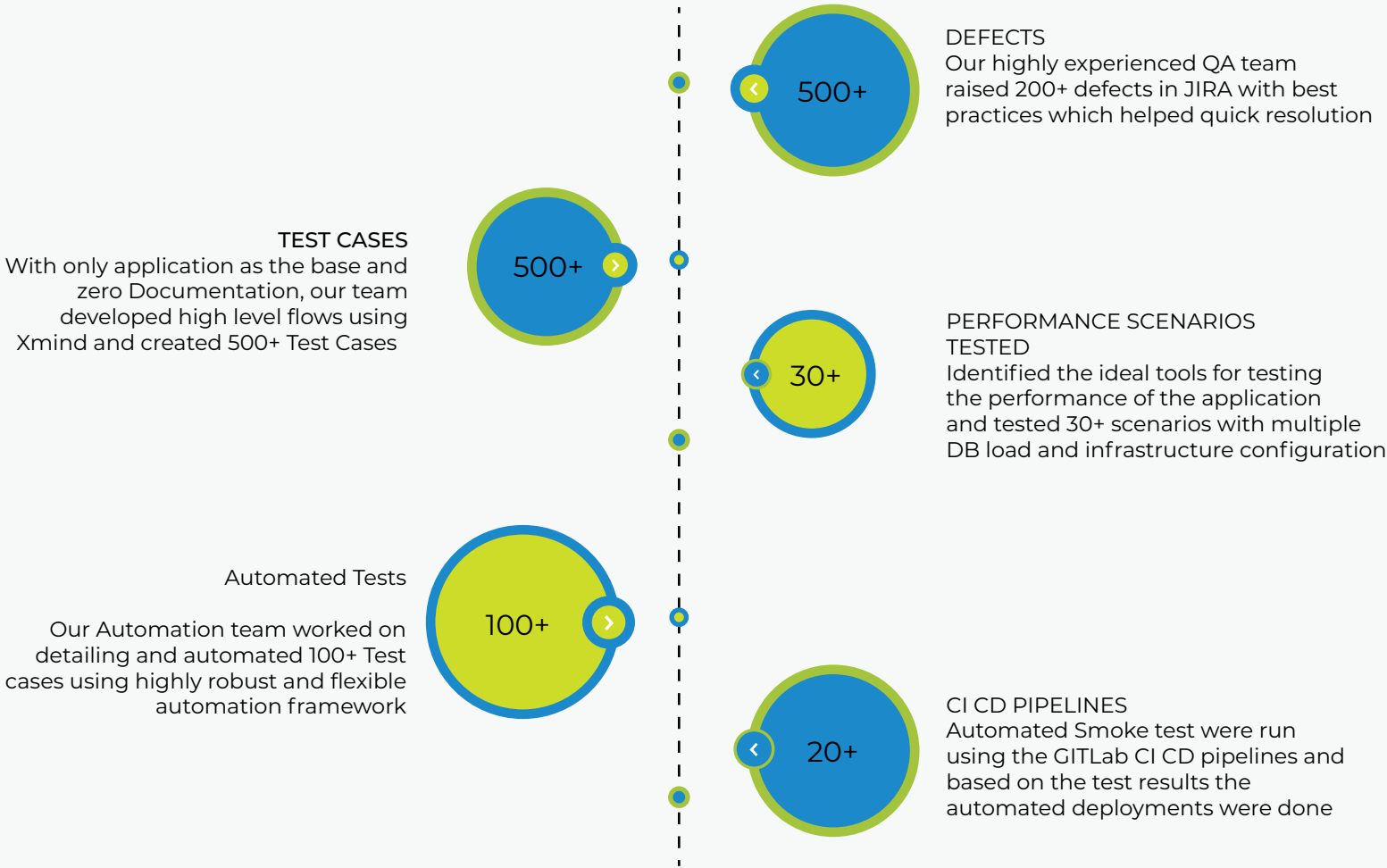
- Automated end to end scenarios along with Smoke/Sanity suites thereby reducing 75% of the execution time.
- Performance testing helped improved the overall response time of the web services by 80%
- Cross Browser, Usability testing helped client gain confidence on application with multiple browser/OS versions.
- Cloud specific testing - Disaster Recovery, Failover, Scalability, High availability
- Security assessment helped to identify and fix the security flaws



Vestrata’s mission is to empower wealth managers and private bank’s by combining their investment solution with state-of-the-art technology and analytics, to fundamentally transform their business model and investment offering.

Challenge (90 days)
Creation of Test Scenarios based on web application to validate the existing portals, To validate the existing portals, their interoperability creating reusable Automation components.

Solution
Created High level scenarios which helped ensure quality of the application
Created reusable Automation Framework using Java enabling quick Smoke and Regression tests, Performance Tests conducted to check the Infra, Code and Application’s behavior





Business Challenges/Requirements

- The Client had no prior QA testing in place and needed subject experts who would help them in executing quality assurance activities on their project.
- In consideration to HMC's need for a QA testing service provider, Magic FinServ got engaged with the client to Start QA testing (Manual and automation testing) for their Web UI Project – Crimson along with Implementing QA processes & best practices.

Technology Landscape

Robust UI automation pack and framework using ■

Selenium ●

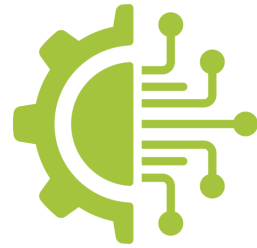
C# ●

Specflow ●

Highly customizable framework to perform UI, Web services, Database validation with a fully integrated framework ■

Set of checklists for frameworks, processes, methodologies, processes and best practices to ensure effective and efficient validations. ■

Setting up schedulers, CI/CD using Azure DevOps ■



Outcomes



- Increased the Functional and Automation test coverage
- Priority based Automation approach helped create a suite that can run anytime to test the crucial tests
- Automated Regression suite for P1 test cases, ran twice a week automatically, thereby saving 60% of the overall manual efforts
- Detailed Automation report led to faster detection and fixing of bugs
- Conducting regular automation demos and deep dive Sessions with Client. This has uplifted the confidence level of the client
- Technically sound QA team, helped good collaboration between Developers and QA team.
- Our Manual testing solution was appreciated and elevated the confidence level of client where it had functional improvements, efforts and accuracy.
- Automated testing and the fact that we inspected their software after each, and every build gave them peace of mind. which in turn increased Magic FinServ's goodwill



Technology Landscape

- GCP, AWS, Terraform, Ansible, Packer, Oauth, Ubuntu, MongoDB, Mailtrap, SendGrid, DataDog, Azure DevOps, Python, Shell Scripting
- Azure, Azure DevOps, ARM Templates, Kubernetes, Docker, Microservices
- AWS, Azure, DataDog, Puppet, TeamCity, JIRA, ELK, Snowflake, GitHub, CodeDeploy/CodeCommit, Kubernetes



Challenges

- Leading FINTECH companies are moving from a product-based model to a SaaS model to accelerate its go-to-market strategy. However, the Fintech companies started facing the challenge of deploying more internal IT resources to maintain the infrastructure operations & Cloud engineering tasks of their increasingly complex and large applications in the cloud.
- They decided to out-task these activities to allow their developer to focus on their core product development and respond faster to new market opportunities.
- Magic FinServ offered a shared service model with centralized Cloud Ops team based out of Noida, India to handle the ITops workload across the clients in various locations.
- MagicFinServ deployed a 24 x 7 x 365 multicloud operation team well trained in AWS, GCP & AZURE infrastructure monitoring and IT support to ensure optimal performance and system reliability at all times.
- The cloud ops team is designed to support an end-user of a particular product, system or application through multiple channels like email, chat, hotline calls and the web portal(Ticketing system).
- MagicFinserv also offered a highly skilled Cloud DevOps team to handle the Cloud Automation, DevOps, Infrastructure as a Code & complex engineering projects.

Benefits

60%

↑ Savings on Storage cost

21%

↑ Savings on Compute cost

80%

↓ Cost reduction of IoT service using edge computing

Case Study - Integrated Investment Management

Cloud Migration, Cloud Operations

Client was facing issues with their new application and wanted a Cloud Transformation solution which could reduce their Capex & get a seamless DB sync periodically.

Challenges

- Client wanted seamless DB sync (every 4 hr) onto their on-prem system
- Wanted Cost effective, reliable & scalable infra
- Secure connectivity between on-prem and Cloud server

Solution

- Achieved seamless database SyncUP through log shipping
- Secured site-to-site connectivity with VPN tunnel using AD between on-prem to cloud
- Detection of malicious activities using AWS GuardDuty.
- Monitoring operation health with CloudWatch.

Benefits

80%

↓ Reduction in Malicious activity using AWS GuardDuty

60%

↑ Savings from Infra and Management

21%

↑ Uptime



Creation of data lake on AWS to manage multiple data types from a wide variety of sources, and store in a centralized repository and run big data analytics and machine learning (ML) to gain insights from your structured/unstructured data sets.

Challenges

- Data Silos - data in different places
- Difficulty analyzing diverse datasets
- Data security & controllership
- Incorporating machine learning

Solution

- Centralized repository
- Storing any amount of data in any format
- Providing controls that allow authorized users to access specific assets
- Connecting analytics and machine learning tools

Benefits



40%

↑ Savings from
Infra and
Management

25%

↑ Uptime

40%

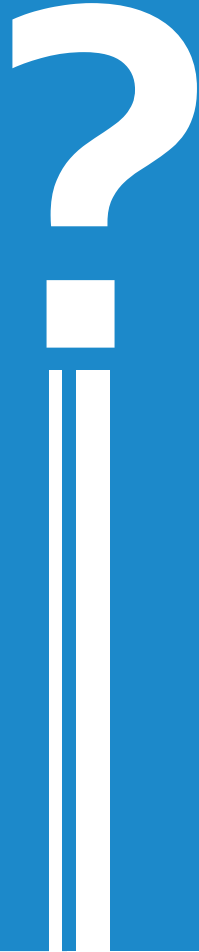
↓ Cost reduction
using Amazon S3
& S3 Glacier



Problem

Being a global market player in financial services, the client needed a world-class responsive & effective engg & support services for their global customer base.

Further, the client intended to migrate to a multi-tenant cloud infrastructure that is designed to scale with all their customers who wish to move to the software as a service model (SaaS). This needed a highly productive, responsive engineering & support team for managing the fastest growth of their business.



Solution

- Full spectrum service --Support, Development, QA, Release Management, Transformation (Web enabling, Cloud migration, Data Integration), Standardization of processes and solutions & Optimization.
- Optimizing platform performance, enhanced product features with the product engineering team.
- Transforming Core platforms to Cloud Based SaaS mode, eliminating Tech Debt. Standardized disparate and fragmented Data Model, significantly improved upgradeability and reduced cost
- Partnering in Data as a Service (DaaS) implementation and helping end customers migrate to Cloud.
- Established an QA service to test the enhancements, bugs and product performance
- Automated modules for testing interfaces to Industry standard platforms
- Set up an offshore service center to provide 24/7/365 monitoring and support via automated, SLA-driven ticket tracking system.
- Provided economical, flexible, domain experts and ITIL-certified professionals.
- Faster issue assessment & resolution via runbook & solution articles.
- Technology Stack – Dot Net, Oracle, C#, Python, Windows power shell, AWS Cloud technologies.



Problem

- Being a global player in the dynamic regulatory market the client was facing challenge of applying more internal IT resources to maintain their increasingly complex, large product platform.
- The On-prem solution had limited options around scalability and fixed drives, in addition to cumbersome processes for procuring new hardware, failover, DR activities & Change management.
- The scalability was hindering the growth & client's go to market strategy.



Solution

- ▶ Full spectrum service :
 - ▶ Support and Maintenance
 - ▶ Development and Engineering
- ▶ Transformation:
 - ▶ Web enabling, Cloud migration, Data Integration
 - ▶ Transforming Core platforms to Cloud Based SaaS mode, eliminating Tech Debt
- ▶ Building an integrated Data Model across all platforms, helps with upsell and cross sell.
- ▶ Optimizing platform performance, enhanced broker feeds processing by over 80% in one instance.
- ▶ Technology – Dot Net, Python, Docker, Kubernetes, AWS Cloud Technologies

Problem

- Current enterprise wide invoice process is highly manual and complex despite implementing expensive downstream platforms.
- Further, the expense processing and allocation is time consuming and had gaps leading to valuation errors and revenue leakage

Solution

- Magic's IP and related integration in Java, Python and React framework.
- Magic's proprietary IP, an AI-driven data extraction engine was customized and implemented for Straight Through Processing of vendor invoices.

Highlights:-

- **Parse diverse formats** - Any invoice format whether it is an Image, PDF, Excel etc can be parsed.
- **Classify invoices** - Invoices that need to be allocated, vendors whose invoices need tax withholding, etc can be identified.
- **Extract information** - Performs intelligent information extraction from different vendor invoices with various templates.
- RPA based enrichment of data as well as RPA enabled workflow for approvals and authorizations.
- API based data ingestion in Core platform such as Coupa, Concur.
- Self-learn - Based on a user's action and feedback, the tool understands the complex business mappings to assist auto population of data.

Problem

- ▶ Lack of a comprehensive utility that can extract and process a wide set of unstructured documents and data sources for Credit Risk assessment and analytics
- ▶ Downstream integration into a set of several internal and third-party



Solution

- ▶ Magic's IP and related integration in Java, Python and React framework.
- ▶ Magic's proprietary IP, an AI-driven data extraction engine was customized and implemented within the client asset lifecycle management framework.

The tool has the ability to:-

- ▶ **Parse diverse formats** - Any KYC document whether it is an Image, PDF, Excel etc can be parsed.
- ▶ **Document Type Classification** :- Solution identifies and segregates different documents and also classifies subcategories under each KYC document. For e.g. Driving license belonging to different states in US.
- ▶ **Data Extraction** :- Solution employs a combination of Template Based Algorithm leveraging spatial information of the data elements in the document and a Heuristics Based Algorithm leveraging business and data specific rules to ensure maximum accuracy for data extraction of critical data elements.



Business Challenges/Requirements

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Solution Highlights

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Technology Landscape

Magic's IP and related integration in Java, Python and React framework.

Business Challenges/Requirements



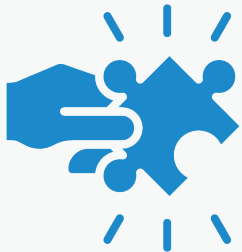
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Magic combines the experience of enterprise application development and financial industry domain knowledge with new-age technologies to power your digital transformation. In addition to the knowledge of traditional programming environments like Java & Microsoft stack, we are well versed in modern frameworks like Angular, Node.js & React along with mobility skills in Android, Windows & iOS. We have expertise in Python, NLP libraries & Machine Learning.

Development Factory for ready to use Standard Connectors

Developed, tested & deployed standard connectors to multiple exchanges using an existing architecture to help a Tier 1 bank implement direct connectivity to multiple global exchanges

Product Development

As a co-source engagement model, helped numerous clients scale up their platform & development team by providing additional bandwidth.

Intelligent Scenario Generator for testing Blockchain Framework

Developed an AI driven scenario generator (stand alone) plugin for a partner with a Distributed Ledger Technology framework.. This ensures test coverage for smart contracts written in a proprietary language with minimal manual effort.

API Integration for an Enterprise Application

Integrated opensource 3rd party APIs ,specializing in derivatives full life cycle management, with an existing complex enterprise application for a mid-sized asset manager

Legacy Code Migration to modern stack

Migrated legacy code base to latest .NET stack for a multi-billion dollar alternative asset manager Migrating legacy and old technology-based web application to the latest Open source and Java driven stack for an Insurance Tech



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Magic FinServ
DRIVING BUSINESS IMPACT FROM INFORMATION

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