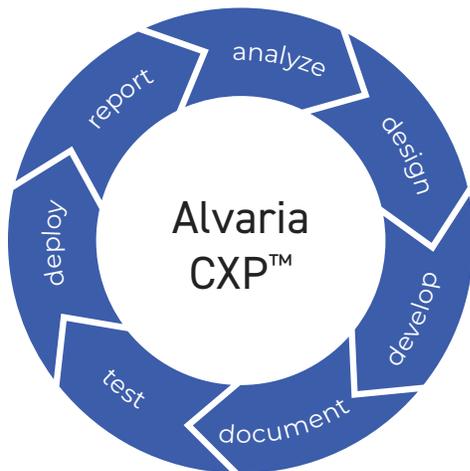# Alvaria CXP™

The only complete application lifecycle management suite for IVR and omnichannel Unified Self-Service™

Improve the customer experience, simplify development and deployment of customer contact applications, make changes and updates faster, and protect your investment. Alvaria CXP is the only platform and toolset that supports the entire self-service application lifecycle from design to deployment to application tuning for all relevant customer engagement channels including IVR, chatbots, voicebots, social chats, and mobile web applications. Alvaria CXP reduces the complexity of delivering sophisticated self-service applications while significantly improving the customer experience – enabling enterprises, service providers and integrators to provide more value across more communication channels at lower costs. Our customers have reported up to 50% savings in development and 80% savings in deployment and maintenance.

Alvaria CXP self-service applications are 100% portable and operate seamlessly with our own premise and cloud solutions, and can also be used to offer enhanced self-service alongside other contact center platforms.

analyze
report
design
deploy
develop
test
document

Alvaria CXP™

Alvaria CXP Application Lifecycle Management coordinates people, processes and tools to streamline development and improve the customer experience:

- Model, design and build resilient Unified Self-Service applications across multiple customer contact channels, including IVR, text (Chat, SMS, USSD), social networks and mobile Web apps

- Improve application delivery and lifecycle traceability from requirements through deployment with features such as integrated testing and one-button documentation

- Centrally deploy, manage and monitor your solution

- Analyze your application in real-time across all deployed interaction channels

- Use detailed reporting to continually fine tune and enhance the customer experience

- Let your business users take control through Alvaria CXP's easy-to-use, Web-based Business User Interface

Key Benefits of Alvaria CXP

Design Once – Deploy Anywhere Architecture
Alvaria CXP's design once, deploy anywhere architecture uniquely enables one application to be deployed across multiple customer contact channels. The channels share underlying business logic and back-end access while maintaining their own unique advantages and characteristics. Supported channels include IVR (with DTMF or speech recognition), text (SMS, USSD), mobile web, and social networks like Facebook Messenger, Whatsapp and Viber.

The solution eliminates the need for redundant development teams, speeds application creation and simplifies ongoing maintenance, while providing a consolidated view of service usage and the customer experience across the different channels. Companies can now accommodate customers' evolving

communication preferences and simultaneously lower support costs with a Unified Self-Service solution and inexpensive text-based communication channels.

Group Level and 1:1 Personalization for a Better Customer Experience
Powered by integration to popular CRM systems, Alvaria CXP™ enables dynamic self-service across multiple channels and languages based on customer types, values, preferences, transaction histories and more.

Traditionally, it's been difficult for application developers to create a personalized IVR experience because it requires so many different prompts and complex dialog logic. With its Layer concept, Alvaria CXP makes it easier to create and maintain personalized dialogs across multiple channels, resulting in streamlined customer interactions, higher self-service adoption rates and improved customer loyalty. The feature also supports targeted, revenue-generating offers and proactive outbound customer support.

Personalized service is not limited to isolated interaction points. With Alvaria CXP Continuity Server, which uses Context Cookies to remember customers' previous interactions, customers can pick up where they left off even if their interactions cross multiple channels, or switch between automated and agent-based interactions, providing a seamless omnichannel customer experience.

Alvaria CXP integrates out-of-the-box with Business Intelligence platforms like SAP BusinessObjects and MicroStrategy so you can use advanced business intelligence solutions to analyze and report on your customer self-service experience.

> Avoiding the cost of third-party, standalone analytics can result in savings of $200,000 to millions depending on the size of the deployment.

Integrated, Actionable Analytics for Continual Improvement
Alvaria CXP provides real-time analysis and reporting of caller behavior, application performance and transaction completion rates to help improve ROI and eliminate caller frustrations. With detailed and actionable analytics from Alvaria CXP, you can make

informed business decisions based on over 60 pre-built reports in the areas of Administration and Maintenance, Application Development and Tuning, and Business and Caller Analysis. Avoiding the cost of third-party, standalone analytics can result in savings of $200,000 to millions depending on the size of the deployment.

Giving your Business Users Control
Whether in the cloud or on-premise, Alvaria CXP includes an easy-to-use, Web-based Business User Interface (BUI) that enables your non-technical staff to take some ownership of the customer-facing self-service applications.

Empower your business users to configure business hours, routing numbers, or marketing or service announcements without having to go through IT or lengthy deployment procedures while limiting the risk through powerful validation rules. Business users can also make live updates to IVR prompts or mobile web app images when needed. All changes are fully audited, can be reverted, and control over individual prompts and configuration items can be granted on a per-department level.

| SMARTPHONE APPS | MOBILE WEB | SOCIAL NETWORKS |
| TEXT MESSAGING | INSTANT MESSAGING | VOIP - IVR |

Unified Self-Service.™

MULTIPLY THE ROI OF YOUR IVR SOLUTION BY EXTENDING YOUR VOICE SELF-SERVICE TO TWO-WAY SMS, CHAT, MOBILE WEB APPS FOR SMARTPHONES, AND EVEN SOCIAL NETWORKING SITES.

Create Mobile Web Applications

Alvaria CXP™ provides an advanced mobile channel interface, based on jQuery Mobile and HTML5. It includes a framework of drag and drop components that accelerates building mobile applications that work across all popular mobile smartphones and tablets. Use Alvaria CXP to build "disposable" mobile Web apps that can be pushed as a URL to your always-connected consumers via SMS. These "micro apps" can be used for transactional purposes such as collections, appointment reminders with options to reschedule, and any other proactive outreach. With Alvaria CXP, mobile apps become one component in an integrated omnichannel experience.

Backend Connectivity

The Alvaria CXP web services interface and connector framework provides easy, secure integration with any backend system or legacy application for existing and future investment protection. Integrations can be reused across multiple customer interaction channels. SOAP based and RESTful web services can be integrated directly, supporting advanced security concepts such as WSS and more. Finally, Alvaria CXP Analyzer automatically provides elaborate statistics about backend availability and performance.

Multi-tenant, Carrier-Grade Solution

With Alvaria CXP, you can deploy multiple tenants and users simultaneously on a single infrastructure, ensuring efficient sharing of resources. Securely separate project, service, resource and user management among tenants and leverage collaborative development among corporate teams. User roles for developers, administrators, and business users provide appropriate access rights to efficiently manage large corporate and managed service environments. Finally, Alvaria CXP provides central management and reporting across multi-data center deployments.

Alvaria CXP Deployment Options

Deploy Alvaria CXP on your premise, access it on demand in the Alvaria cloud, or deploy a hybrid combination of the two. Alvaria CXP Hosting offers instant start up, no up-front investment and is backed by the power of our multi-site, global hosting platform. The result is proven performance, scalability and the industry's first 100% uptime service level agreement (SLA).

Built on open standards, Alvaria CXP applications are portable across all VoiceXML-based IVR platforms, SMS/USSD gateways, and mobile devices, and can be used to complement Alvaria's on-premises and cloud-based contact center solutions as well as those from third party vendors.

Migrating Your Applications to Alvaria CXP

CXP provides a rich GUI development interface, reusable application building blocks and automated migration and testing tools that ease the move from legacy environments. Alvaria has helped many customers replace their outdated IVR platforms and applications with a modern Unified Self-Service solution.

With Alvaria CXP you also have access to a vast pool of partners and Alvaria® Professional Services to assist in executing on your customer experience vision, with deep expertise spanning vertical markets and applications.

Alvaria CXP Solution Components

Alvaria CX Server

Alvaria CX Server is the execution engine that supports the generation of dynamic dialogs and interfaces. Alvaria CX Server enables highly scalable, carrier-grade deployment and management of personalized self-service applications.

Key Features and Benefits

- Design once, deploy anywhere architecture
- Dynamic personalization to address customer preferences and streamline interactions
- Cluster management for large enterprises and service providers
- Multi-tenancy support: Operate one platform for multiple clients
- Easy integration with third-party development and administration tools through Alvaria CXP's comprehensive web service interface
- Easily apply real-time changes to live services on IVR, text, and web channels with Alvaria CXP Business User Interface
- One-click hot service redeployments and rollbacks

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Key Features and Benefits (continued)

- SNMP traps and e-mail notifications to rapidly alert operations personnel to unexpected occurrences in an installation
- Services auto-adapt to new mark-up standards (such as VoiceXML) and IVR, ASR and TTS releases
- Support for omnichannel applications spanning voice (IVR), text (Chat, SMS, USSD), video (IVVR), social chats and mobile Web apps for Smartphones
- One-click portability across 32 leading IVR platforms including Alvaria as well as Avaya, Cisco, Genesys, Holly, West, HP, Intervoice, Convergys, Nortel, Nuance and Syntellect
- The ability to simultaneously run Alvaria CXP applications across multiple IVR platforms in parallel

Alvaria CX Continuity Server™

Alvaria CX Continuity Server facilitates the seamless, omnichannel customer journey by preserving state across different customer touchpoints. Continuity Server functions as a data store for Context Cookies that enable you to personalize self-service interactions, improving the customer experience by knowing when and why they contacted your company last and whether the caller has achieved their goal or not.

Key Features and Benefits

- Preserve session state across multiple touch points, so the system always knows what the customer did last
- Retain user preferences, such as language choice
- Find out what the last call or session was about, and whether the caller achieved their goal
- Distinguish frequent callers from new callers
- Track the last page of your website the customer visited
- Offer to pick it up from where the user left the last session, so as to avoid tedious repetition and to improve the service experience

Alvaria CX Designer™ – Application Development

Alvaria CX Designer is the true multi-channel graphical development environment for creating, testing, deploying and monitoring multi-channel self-service applications. Alvaria CXP uses an object-oriented approach for application development, which supports full re-use of individual objects (dialog steps) and modules. Developers have the ability to automatically narrow their view to a specific channel. For example, IVR development centers around voice prompts and grammars, while mobile web development focuses on web forms, text and image content.

Alvaria CX Designer is a web based, visual IDE that enables team collaboration based on one central repository, and also supports offline development and testing.

Alvaria CX Commander™ – Application and Server Management

Alvaria CX Commander provides a graphical administration interface for managing and monitoring Alvaria CX Server, enabling application updates, rollbacks, and application call tracing. With a single action, you can roll out application updates across an entire server farm with no service downtime or manual distribution of files. Hot restore instantly reverts the deployment of broken application. Alvaria CX Commander can be used to centrally control Alvaria CXP Clusters across multiple data centers.

Business User Interface

Alvaria CX Designer is complemented by an easy-to-use, Web-based Business User Interface that lets your non-technical staff take control of typical configuration parameters such as IVR prompts and mobile Web application images, business hours, routing destinations for your IVR, or service announcements that need to be activated at certain times. The BUI enables live, IT-free deployment updates that allow whole new ways to keep your self-service applications up-to-date.

Key Features and Benefits

- Multi-tenant, role-based, powerful graphical service development
- Easy-to-use object library, no manual coding
- Reusable application building blocks and built-in best practices
- Natural Dialog Management ensures human-like, natural interaction
- Connector framework for seamless integration into existing IT infrastructure and backend systems
- Hotspot Analytics highlights weak points and bottlenecks in your applications right in the development environment, based on statistical data on automation success rates, user navigation patterns and the user experience
- Integrated testing and debugging tools
- Easy and flexible tuning supported by call tracing, logging and reports
- Centralized, role-based user management
- Team collaboration, audit trails
- Integrated project and version control with check-in/out
- Integrated management console for real-time monitoring, server and service management
- Tools for faster migration of legacy applications
- Switch between channel-specific perspectives and an omnichannel perspective, allowing for true omnichannel service development

eliminating time-consuming ETL (extract transform load) procedures that are typically required to migrate data and make it useful to your Business Intelligence solution, allowing for historical and near-real time reporting.

Key Features and Benefits

- Comprehensive caller behavior analysis including Dominant Path Analysis, drop-off rates, and menu navigation patterns.
- Real-time analysis with no data load or transformation steps
- Out-of-the-box real-time logging of service usage
- Leverages standard business intelligence functionalities of common BI tools
- Integration with Google Analytics for mobile web application usage insights
- Extensible data model
- Over 60 pre-built reports for business analysts, developers and administrators
- Reports can be further tailored to meet your company's requirements
- Works with MicroStrategy and SAP BusinessObjects

Alvaria CX Analyzer™ – Real-time Analysis and Reporting
Alvaria CX Analyzer provides reporting and analysis of key business, operational and application usage and performance data. Based on data from Infostore, the integrated logging data repository of Alvaria CX Server™, users can access live information through popular Business Intelligence software such MicroStrategy and SAP BusinessObjects. The solution collects usage and performance data on system and application levels, caller behavior, task completion rates and voice recognition success. This information flows directly into the data warehouse,

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Reports for Business Analysts and Marketing Specialists

- How many unique callers do you have?
- How often do they call?
- How do usage patterns differ between different customer segments?
- Do all customers have a good service experience?
- What are the callers' major navigation patterns?
- Do users achieve their goals successfully? If not, why do they fail?
- Is personalization helping customers use the application?

Reports for Administrators and System Operators

- What is the workload of your server cluster?
- Is the current number of ports sufficient?
- Are the servers properly sized and configured?
- What is the percentage of aborted and rejected sessions (and why do they fail)?
- What are response times and error rates of the different backend systems?

Reports for Dialog Designers and Developers

- Where do users get lost in the service and drop out?
- What are typical usage patterns?
- Which input states require tuning?
- Are there daily/monthly trends in the use of your application?
- What are your most actively used self services? On which channels?
- Which prompts lead to an unusually high rate of No Input / No Match events?
- What are callers actually saying in the IVR?

About Alvaria™

Alvaria helps organizations efficiently manage and engage the modern workforce and connect compliantly with customers and prospects. Our open, innovative multi-platform is purpose built for two core competencies; a feature-rich, intuitive, and intelligent workforce engagement management platform, and a multichannel proactive compliant outreach platform. Alvaria, the product of the merger of world leaders - Aspect Software and Noble Systems - is proudly celebrating 50 years in business reshaping customer and employee experience. ALVARIA. Reshaping Customer Experience™.

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