SAP Build Work Zone Overview, Beginners Guide and Technical Insights - Part 1

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ABSTRACT

SAP Build Work Zone is a digital workspace solution that aims to boost employee efficiency and involvement by offering a personalized gateway to applications, processes, data, and communication tools. It serves as a hub where employees can seamlessly engage with enterprise systems and resources whether they are, on-site or working remotely. Work Zone seamlessly integrates with both SAP and non-SAP systems providing a platform that can be customized to suit the requirements of different roles within an organization. It features work areas, dashboards, and tools that bring together tasks, notifications, and data from sources in one user-friendly interface. With its drag-and-drop simplicity for site creation, this platform facilitates the integration of enterprise apps and third-party solutions. By streamlining user experiences it tackles issues like juggling systems accessing diverse applications and managing complex tasks effectively. SAP Build Work Zone empowers users to complete their tasks access information easily stay updated with reports and alerts while enabling access, from any device at any location. These digital experience services are crafted to provide uniform and captivating user experiences across all channels, business processes, and applications. Essential components comprise pages using drag-and-drop editor business templates, for generating content personalized branding and theming and streamlined content management along, with creating a knowledge base.

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Introduction

SAP Build Work Zone is a component of SAP's Digital Experience package offering a smart work environment. It allows users to easily create websites using a drag-and-drop interface, link applications, and incorporate tools. This all-in-one platform tackles obstacles like navigating through systems and software as well as streamlining intricate assignments. With SAP Build Work Zone users can efficiently complete their tasks locate information stay updated with notifications and reports and work from any location, on any device.

SAP Start serves as a gateway, to SAP's range of applications offering users a cohesive experience. It functions as a hub where individuals can easily access SAP services and tools streamlining their work processes and boosting efficiency. By providing an interface SAP Start simplifies navigation, across SAP solutions allowing users to effectively handle their tasks without the need to switch between multiple applications.

Business Application Studio (BAS) is a powerful development environment designed to simplify the creation, management, and deployment of business applications. As part of SAP's portfolio of development tools, BAS provides a modern and comprehensive Integrated Development Environment (IDE) tailored for building enterprise-grade applications. It supports multiple programming languages and frameworks, enabling developers to work on diverse projects within a single platform.

SAP Fiori is a user interface design system created by SAP to enhance the user experience in their software applications. It focuses on delivering an easy, easy-to-use interface that streamlines business tasks through well-defined design principles and responsive layouts.

Offerings around SAP Build Work Zone
SAP Start serves as the primary gateway to selected SAP Cloud Solutions like SuccessFactors or S/4 HANA. It provides users with a centralized hub to search for applications, manage tasks through the SAP Task Center, and receive personalized interest cards tailored to their roles. A key advantage of SAP Start is its seamless integration with supported SAP Cloud Solutions, requiring minimal setup for immediate use. Built upon the foundation of SAP Build Work Zone, SAP Start enables easy expansion to integrate with on-premises, custom, and third-party applications. Organizations can effortlessly upgrade to SAP Build Work Zone, standard edition, to create role-based application sites with customizable pages and spaces as their needs evolve.
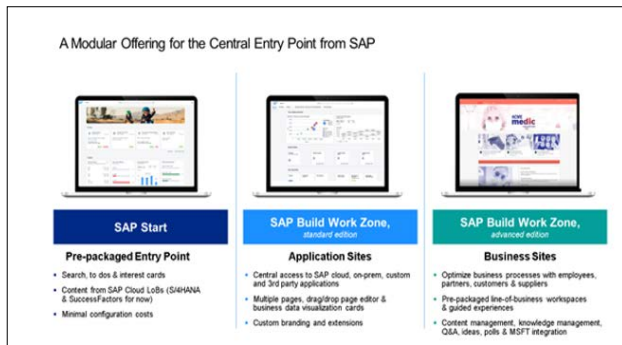
The SAP Build Work Zone Standard edition is designed to boost user efficiency while also supporting change, with improved flexibility and interactive features. It provides an experience through role views, notifications, and a task center along with a mobile app for easy access. Users can enjoy information retrieval through enterprise search and speedy application launching. Integration cards help simplify workflows across applications. Customization options allow organizations to customize the solution to fit user requirements, including elements, drag-and-drop widgets, and customizable theme templates for a consistent and user-friendly experience.

The SAP Build Work Zone Advanced edition allows users to create workspaces that are designed to improve collaboration, across teams. It includes features such as multimedia support, robust content management, and seamless integration with Microsoft Teams. This version helps organizations build business sites that boost interaction with employees, customers, partners, and suppliers. Some of its functions include decentralized content creation widgets for page construction and the ability to incorporate business content packages. It enables the blending of business data with content and multimedia by leveraging Microsoft Teams for better teamwork. The platform enhances user engagement by offering workspaces, extensive document-handling tools, and a comprehensive knowledge repository. Customization features enable organizations to personalize templates for pages and workspaces promoting interaction through user interfaces and UI cards.

The SAP SuccessFactors Work Zone leverages several SAP Business Technology Platform (BTP) services, including the advanced edition of SAP Build Work Zone.

Advantages of SAP Build Work Zone
The SAP Build Work Zone focuses on delivering access, to applications, tasks, and processes in a manner while offering personalized user experiences based on roles. It integrates business content from SAP solutions, partners, and custom sources to enhance experiences through applications. Users can benefit from tailored solutions that enhance Launchpad sites with widgets and guided interactions.

Business users can create, share, and organize content efficiently using designed templates and collaborative workspaces that combine SAP with third-party applications. The Work Zone aims to increase productivity by providing access to tools, data, and role-specific content in an environment. It follows SAP Fiori design principles to ensure a user experience across devices while optimizing task management, team collaboration, and information access, within the SAP ecosystem.

When choosing between SAP Build Work Zone Standard Edition and Advanced Edition it's important to make sure your decision aligns, with your company's strategy, vision, and goals. Having both editions set up on the platform isn't a must-do; it's more about tailoring your choice to meet your business requirements. The Standard Edition acts as a hub for accessing SAP and third-party applications making it a good fit for organizations looking for access and basic customization options. On the other hand, the Advanced Edition and SuccessFactors offer advanced features like robust collaboration tools, for both internal and external users and the ability to create multiple sites.

The Advanced Edition and SuccessFactors expand on the features of the Standard Edition by providing capabilities to improve teamwork and content organization. This involves developing a platform, with diverse multimedia options and advanced business content bundles, designed for companies aiming to streamline inter-departmental workflows and boost user involvement.

Exploring the Solution Design of SAP Build Work Zone
The SAP Build Work Zone consists of multiple architectural components, some integral to the service and others optional. It is part of the Business Technology Platform (BTP) offerings and is available in a multi-cloud environment powered by SAP Cloud Foundry. Key components include alert notifications, mobile services, UI flexibility for key users, workflow service, UI theme design, and digital workspace service.

Optional services like SAP Build Process Automation, Business Application Studio, SAP Build Apps, and SAP Task Center can be used with the HTML5 App Repository. Additional BTP services are needed to handle custom domain and cross-landscape requirements.

For authentication and authorization, SAP Cloud Identity Service allows user addition to your domain and role provisioning. Integration with SAP S/4HANA and other SAP offerings is possible, using cloud connectors for secure tunnels between cloud and on-premises systems.
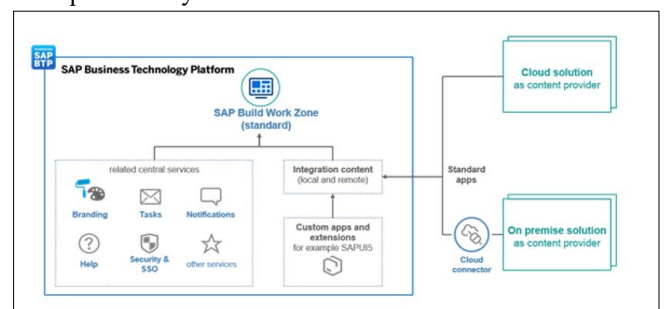
Business users can access applications and tasks in one place through Application Integration, which seamlessly combines UI technologies and third-party apps. This system offers a user experience tailored to roles on a business site, with customizable content and design. It connects with SAP BTP services like inbox and cloud identity services allowing for customization, through plugins and unique branding options. The key elements of the structure include:

Core Services: The foundation of SAP Build Work Zone lies in its service layer, which consists of features, like managing users ensuring authentication, and controlling access. These functions are vital for maintaining a regulated environment on the platform.
Work Zone Directory: The Work Zone Directory is responsible

for arranging and overseeing locations within the SAP Build Work Zone. These sites act as organized spaces that control access to business applications allowing for organization and management.

Content Management: The content management tool enables admins to manage and regulate aspects of the operation of the platform such as business apps, catalogs, groups, and roles. Content can be generated manually. Brought in through content federation procedures.

Integration Framework: The SAP Build Work Zone features an integration framework that facilitates the integration of content and applications. This framework allows administrators to set up and oversee content providers, enhancing the platform functionality by integrating resources.

Configuration and Administration Tools: The structure consists of tools for setting up and managing, like the Work Zone Configurator. This tool helps with the steps and arrangement of the system including establishing authentication methods and initial site setups.

Extensibility and Customization: The structure enables flexibility and personalization using APIs and tools, for development. This gives companies the ability to customize the platform according to their requirements seamlessly integrating with systems and processes.

User Interface/Launchpad: The SAP Build Work Zones user interface aims to be user-friendly and easy to navigate offering access, to all its features and functions.

SAP Build Workzone Advanced Edition
The architecture for SAP Build Work Zone, advanced edition, and SAP SuccessFactors Work Zone share the same architecture and core functionalities. Both editions include rich, pre-delivered content that is regularly updated by SAP for HXM and other SAP LOB scenarios. They offer the same features; the primary difference lies in their packaging. SAP SuccessFactors Work Zone comes as a solution bundle with additional SAP BTP services included, while SAP Build Work Zone, advanced edition, focuses solely on the Work Zone platform itself.

SAP Build Work Zone, advanced edition: default components are:

Digital Workplace Service (DWS): oversees functions, work pages, workspaces, and associated elements, within SAP Build Work Zone. It functions as a microservice.

Launchpad grants users access to SAP and third-party business applications, through the user interface of SAP Build Work Zone.

The UI Theme Designer enables users to personalize the appearance of the user interface using defined themes.

**Mobile Services:** Forms the foundation for the SAP Build Work Zone Advanced native mobile application.

SAP Connectivity Service and SAP Destination Service: Facilitates access to SAP and third-party business applications, and routes user requests to on-premises systems, cloud systems, or Enterprise Service Business platforms. Handles authentication between the application shell and Digital Workplace Service using

a predefined destination "JAM". Note that while these services are integral to the functionality, they are part of the broader SAP Business Technology Platform (BTP) offering rather than being directly integrated into the Launchpad itself.

Mandatory Components are:
SAP Cloud Identity Services Identity Authentication (IAS) authenticates users within the SAP Build Work Zone using protocols like SAML 2.0 or OpenID Connect. It can function independently or as a proxy to corporate Identity Providers (e.g., Microsoft Entra ID, Ping Identity).

SAP Cloud Identity Service Identity Provisioning (IPS) serves as middleware, extracting user data and permissions from source systems and provisioning them into the desired SAP target systems. It utilizes the SCIM (System for Cross-domain Identity Management) 2.0 API for managing user records and lists.
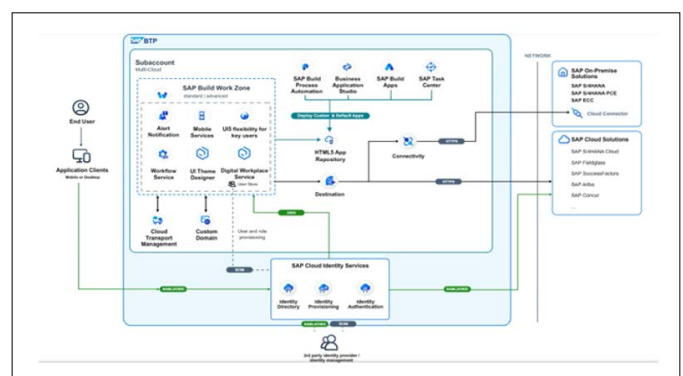
Implementation of IAS and IPS should align with corporate security architectures for both SAP and third-party solutions. These services are integral to various SAP cloud offerings, including SAP S/4HANA Cloud and SAP SuccessFactors.

Optional Components of SAP Build Work Zone, Advanced Edition Include:
The SAP Business Application Studio enables the creation of both advanced extensions, for SAP Build Work Zone. It includes features like UI Integration Cards, Launchpad Plugins, Workflows, Content Packages, and HTML5 applications.

With SAP Build Process Automation everyday users can improve business processes by using management tools and robotic process automation without any coding required.

The SAP Task Center service seamlessly integrates with SAP applications to offer users a platform, for managing all their assigned tasks.

Users are alerted to events that need attention through the SAP Notification Service. Notifications appear under the bell icon located in the corner of the interface.

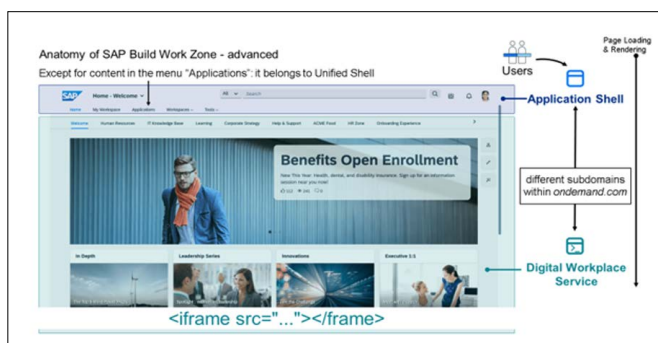**Digital Workspace Service (DWS)**
Digital Workplace Service (DWS) is a core component of SAP Build, also known as SAP Build Work Zone. It offers a range of functionalities including a role-based site menu builder, diverse workspaces with specialized features, content management, and collaboration tools. Each workspace added to the global menu can be configured with distinct access permissions based on the scope of implementation. The Admin Console, accessible via the user avatar menu, serves as the central hub of DWS.

In scenarios where multiple units within a company utilize Work Zone, an administration area concept applies, typically centralized under one admin area called the company area. Only users with roles like Support Admin or Company Admin have the authority to manage features, maintain work pages, and adjust settings within the company area. These settings, crucial for overseeing the overall functionality of DWS, are controlled by designated Area Admins nominated by Support Admins or Company Admins. The range of configurable settings is extensive yet can be further restricted as needed.

DWS is smoothly incorporated into the SAP Build Work Zone through a process. When a user logs in to the SAP Build Work Zone, the application shell loads, with components such as the header bar, user menu, and required system libraries. Next, the application shell sends a request to the DWS API to obtain an access token. This token allows for a sign-on experience ensuring secure communication between the application shell and the DWS microservice.


Administration Console → Overview
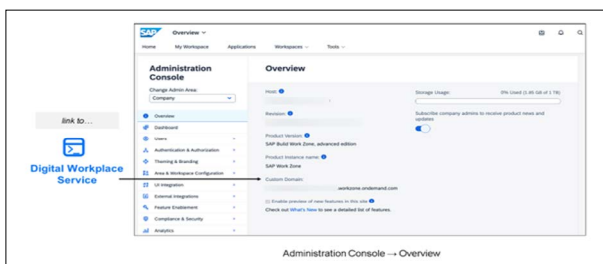
After acquiring the access token the application shell proceeds to embed DWS within itself using an HTML `<iframe>` tag. This method effectively encapsulates DWS as an application within the SAP Build Work Zone application framework. By utilizing the `<iframe>` tag DWS functionalities seamlessly blend in. Are easily accessible, within the setting of the SAP Build Work Zone providing users with a cohesive experience and maximizing efficiency in utilizing DWS features.

Launchpad
The Digital Workplace Service (DWS) is a part of the SAP Build Work Zone, which also includes its edition and SAP SuccessFactors Work Zone. It acts as a hub for users to access SAP and third-party business applications whether they are cloud-based or on-premise. Within DWS the Launchpad provides a user interface, for configuring and overseeing these business applications. This feature, known as Work Zone Manager, can be found in the Admin Console under External Integrations > Business Content menu.

It's worth noting that although DWS functions as an application, within SAP Build Work Zone, accessed through a <iframe> with its URL the Applications tab is seamlessly integrated into the application shell. This integration ensures that users can conveniently manage and use applications directly from the interface of SAP Build Work Zone improving usability and functionality.
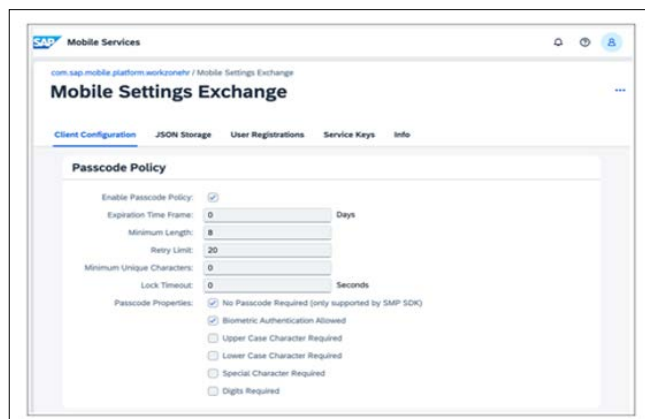

Content Manager
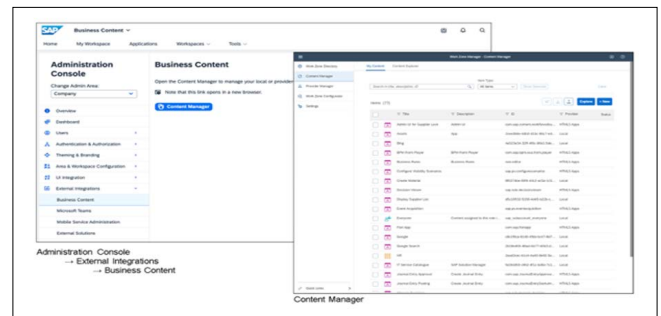
The Work Zone Manager in SAP Build Work Zone simplifies management and configuration through its five main menus. The Work Zone Directory administers sites, crucial for organizing access to business applications, with one site auto-generated in the advanced edition setup. Administrators use the Content Manager to oversee apps, catalogs, groups, and roles, manually creating or importing them via content federation. The Channel Manager configures external content providers, improving integration by default supporting HTML5 apps from SAP BTP. The Work Zone Configurator, post-Booster execution, sets up DWS fallback authentication, while Settings manages parameters and error logs for comprehensive environment control and customization.

Mobile Services
SAP Build Work Zone utilizes the SAP UI5 framework and adheres to the SAP Fiori design principles for its user interface and user experience. This design approach ensures a consistent and appealing appearance across all platforms where a web browser with internet access is available. Whether accessed from a desktop, tablet, or mobile phone, users experience the same latest features of SAP Build Work Zone in an optimized, mobile-friendly interface without requiring special settings—it's ready out of the box.

In the advanced edition, the SAP Build Work Zone is integral and cannot be separated from its underlying components. It leverages mobile services libraries to facilitate tasks such as user onboarding, applying security policies (including session expiration and password policies), managing application updates, and controlling mobile-specific features like camera usage within the application.

Administrators can configure synchronization policies for application components across different channels (Wi-Fi, mobile networks, roaming) through the administration console under External Integrations > Mobile services administration. This control allows administrators to specify synchronization behaviors for components such as Analytics, Client resources, Logs, Offline OData, and others, ensuring efficient and secure data management across mobile environments.

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Conclusion

In summary, SAP Build Work Zone stands out as a solution, for today's businesses seamlessly integrating features to boost operational efficiency and user satisfaction. The platform's strong points, like the Digital Workspace Service (DWS) and Launchpad along with its adherence to the SAP Fiori design system and SAP UI5 framework, offer a user-friendly interface on all devices. Its advanced mobile services ensure effective connectivity enhancing its overall usability. By making use of these capabilities SAP Build Work Zone provides an edge by helping organizations streamline operations promote collaboration and uphold standards of security and compliance. This white paper has delved into the aspects of SAP Build Work Zone highlighting its role, in guiding businesses through their digital transformation journey [1-8].

Declarations

Ethics Approval and Consent to Participate: Not Applicable Consent for Publication: All authors have consent to submit this paper to the Journal of Cloud Computing. Also, we confirm that this paper or any part of this paper was not submitted anywhere.

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