

INTEGRATING SINGLE SIGN-ON (SSO) WITH SUMMIT V6.2

SUMMIT TRICKS AND TRAPS

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As we continue from the last release, some of the challenges other than Azure ID and Summit User ID mismatch are discussed below.

Also, learn how you can integrate SSO with GreenPoint's Summit application.

To review the previous release, please [click here](#).

Unexpected 'Session Timeout'

Summit, after logging in, would log out the user forcibly.

- OIDC requests access tokens after a specific percentage of token lifespan. The SummitFT.exe.config has an OpenIDRefreshMarginPercentage tag, which is a configurable value after which the OIDC refresh access token will be initiated.
- Summit was not requesting a refresh token from MS Azure and this was causing a forceful logout.

This issue was identified by the team from the Azure side, where it was identified that Summit was not requesting a refresh token during the authentication with Azure AD. The response received included a 'null ID Token' value. This token timeout caused the users to forcefully log out of the current Summit session as the token value received was null.

This was handled programmatically, and the token was requested at the end of the refresh margin time percentage set in 'SummitFT.exe.config'.

The 'Timeout' issue was therefore resolved, but there was one more challenge to overcome.

Microsoft changes 'Keys' periodically, preventing user access...

Once SSO was established, a security feature was discovered that blocked its use over longer periods of time.

- The Summit backend used to have a hardcoded key which was being used to decrypt the user access token. This hardcoded token was available as a part of sso.xml.
- This key would be changed by Microsoft based on its own schedule, and it would happen on an ad hoc basis.
- If the key is changed by Microsoft Azure, users will not be able to login to Summit, and this will cause downtime for business users.

This was resolved by the team by programmatically fetching the key values dynamically from Azure, which was used to decrypt the user token.

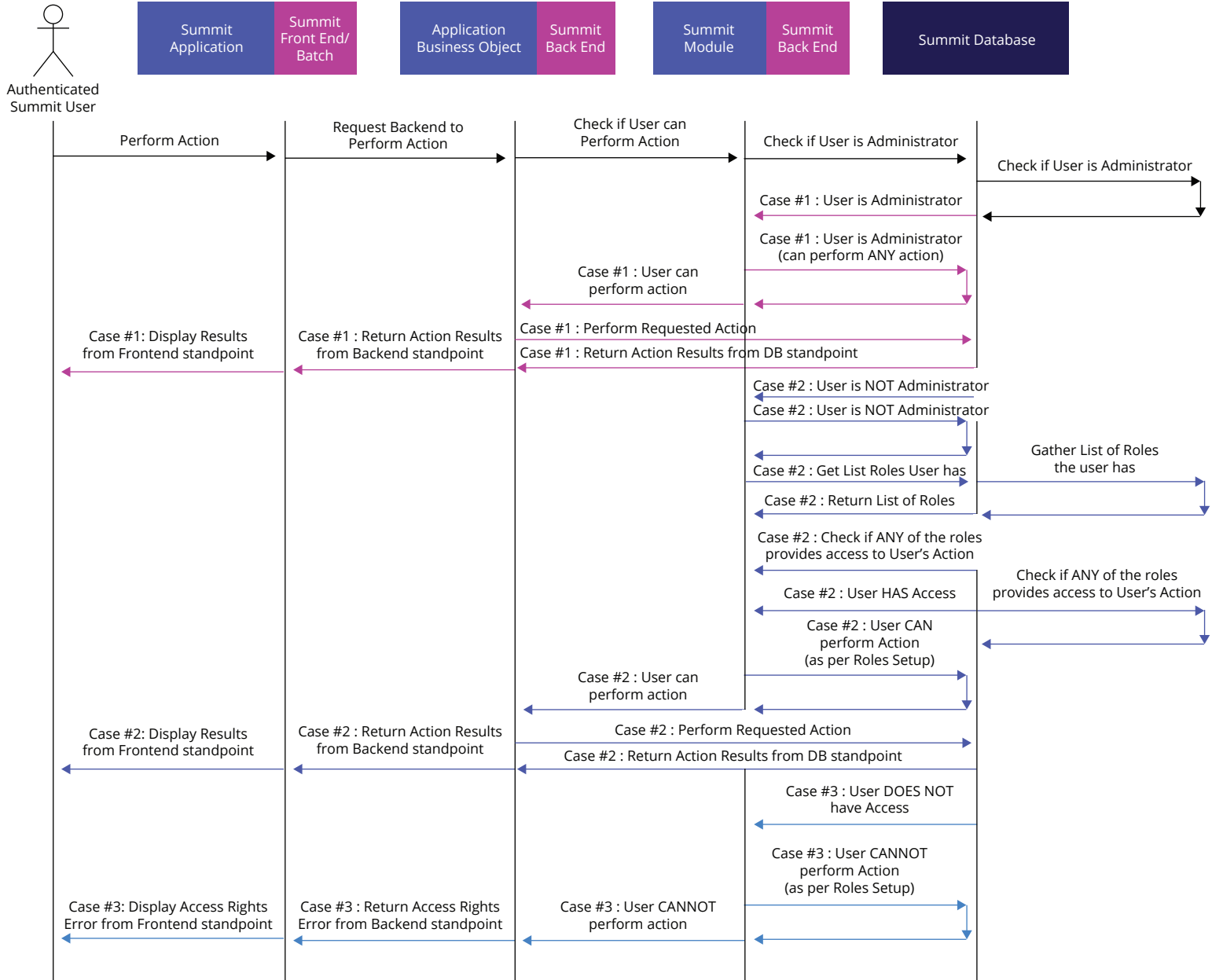
As a part of the sso.xml, well_Known_Url is provided, which was used to fetch all the available keys in jwks_uri while using the correct key to decrypt the user access token.

Ultimately, SSO was enabled and made robust by recognizing the issues caused by mismatches between Summit and Azure, and knowing how to circumvent these differences through the deep expertise of both Azure and Summit.

Summit SSO Authentication and Authorization workflow

When SSO is used in conjunction with an identity and access management (IAM) system, a central directory is used to regulate user access to resources on a more granular level. This enables businesses to comply with regulations that demand that users be given the necessary permissions.

Summit SSO handles both authentication and authorization with the workflow described below:



Find out about the other challenges encountered by GreenPoint Summit during SSO integration in our next release.

Be sure to check out this space for more interesting summit topics!

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- › GreenPoint Summit is a comprehensive platform encompassing new implementations, version and module upgrades, product and application development, test automation, cloud migration, and system maintenance
- › Our quantitative services and platforms include Libor Replacement Simulation Tool (LRST), curve creation, recreation and management, model validation and documentation, and creation of challenger models for regulatory compliance.
- › Our summit professionals also provide data porting, migration and management as well as cloud services.
- › Over the last year we have completed several projects including full system upgrades, Libor/RFR migration, replacement of valuation frameworks, and custom code creation and testing for large global banks and insurers.

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Sanjay Sharma, PhD

FOUNDER AND CHAIRMAN

Sanjay provides strategic and tactical guidance to GreenPoint senior management and serves as client ombudsman. His career in the financial services industry spans three decades during which he has held investment banking and C-level risk management positions at Royal Bank of Canada (RBC) Goldman Sachs, Merrill Lynch, Citigroup, Moody's, and Natixis. Sanjay is the author of "Risk Transparency" (Risk Books, 2013), Data Privacy and GDPR Handbook (Wiley, 2019), and co-author of "The Fundamental Review of Trading Book (or FRTB) - Impact and Implementation" (Risk Books, 2018).

Sanjay was the Founding Director of the RBC/Hass Fellowship Program at the University of California at Berkeley and has served as an advisor and a member of the Board of Directors of UPS Capital (a Division of UPS). He has also served on the Global Board of Directors for Professional Risk International Association (PRMIA).

Sanjay holds a PhD in Finance and International Business from New York University and an MBA from the Wharton School of Business and has undergraduate degrees in Physics and Marine Engineering. As well as being a regular speaker at conferences, Sanjay actively teaches postgraduate level courses in business and quantitative finance at EDHEC (NICE, France), Fordham, and Columbia Universities.



Ragavendran Ragothaman

TECHNICAL MANAGER

Ragavendran has over 15 years of experience across various derivatives trading systems. He has worked in trading systems such as Summit, Sophis Risqué, and Murex. He has extensively worked on Interest Rate and Equity Derivatives and Fixed Income Products, mainly as a Techno Functional Expert. He has been responsible for customizing and extending the functionality of Summit and Sophis products. Ragavendran has developed the business-critical utilities, reports and feeds for front and back offices. He has also supported Summit business users across different geographical locations (UK, USA, Europe, and Singapore). Ragavendran has expertise in Summit upgrade projects which involves upgrading to Summit v6.2 from lower versions of Summit. He has sound knowledge in setting up and configuration of Summit Insight. He has expertise in setting up client environment in the Finastra servers. Ragavendran has earlier worked in Cognizant, Infosys, TCS, and HCL Technologies.

Ragavendran holds a BTech in Information Technology from Anna University. He holds Python certifications and is currently pursuing Data Science related certifications.

He is an ardent carom board player and has played inter-college tournaments during his graduation days. He also loves playing the Mridangam.

Ragavendran lives with his family in Chennai, India.



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