



# ICE Server 3.2.0

Release notes for prerelease

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## 1 New & Improved

These changes add new features or improve the functionality of existing ones:

- Minio ‘add-user’ job fix 3.2. (ICE-17524)
- Combine tactical licenses with the enterprise session licenses. (ICE-17139)
- Desktop should display total Number of user groups configured on the server and also sort it alphabetically. (ICE-14867)
- Update system health and alert dashboards for 3.2 release. (ICE-17074)
- Update “sess:UpdateChannelSubscriptions” to support turn on/off channel participants presence related events. (ICE-17035)
- Create a custom Executor that guarantee broadcast messages with the same “placeId”/“platformClientId” are processed in order. (ICE-16871)
- SPIKE: Use Grafana 7.x alert config in Grafana 8.5.x. (ICE-16829)
- Remove all default Grafana dashboards by default. (ICE-16808)
- Implement telephony/gateway leader mode in the universal agent. (ICE-16437)
- Add ENGAGE\_FEATURE\_ID\_RP\_STATIC\_REFLECTOR featureset to reflector external server session info. (ICE-16423)
- Restart IPphone pod if configmap changed. (ICE-16392)
- Update EngageLicenseDescriptor type’s featureSet attribute to an object instead of a JSON string. (ICE-16378)
- Implement leader election in the universal agent. (ICE-16183)
- Kafka Message Bus New Approach POC. (ICE-16213)
- Agents: use audioStreamId field. (ICE-15255)
- Generalize EventObservers configuration for easy reuse. (ICE-16322)
- Upgrade shiro-core-1.3.2.jar and shiro-guice-1.3.2.jar based on the vulnerability report. (ICE-16370)
- Migrate the old BridgeMetrics (codahale metrics) to prometheus. (ICE-16298)
- Address SonarLint issues for ‘client-bridge’ module. (ICE-16333)
- Optimize response PlatformMessage processing by bridge instances. (ICE-16255)
- Refactor Cache Related Logic. (ICE-16211)
- Optimize patch validation functionality. (ICE-16185)
- Authorization/Authentication logic refactoring. (ICE-16111)
- Include “featureset” (included in SessionInfo) in the response for tactical license activation. (ICE-16160)
- Update PatchValidationService logic to disallow any “secure” channels to be patched. (ICE-16128)
- Create Rallypoint agent sidecar. (ICE-15425)

- Additional enhancements to logging of Arcus requests and responses. (ICE-16159)
- Create functional tests for ensuring patch agents receiving channel level events. (ICE-4508)
- Logout RP if it was deleted. (ICE-16148)
- Add a “secure” attribute to Channel capability. (ICE-16127)
- Verify Arcus allows channel(s) to be removed from a patch when the patch status is ACTIVE. (ICE-16136)
- Configure/Update logging to capture request and response message in Grafana. (ICE-16087)
- Add ability to set Multicast Failover setting for Enterprise channels. (ICE-16101)
- Emit AssemblyPoint entity’s ValueChange event to everyone. (ICE-16046)
- Allow “base:SetAttributes” for AssemblyPoint by adding a subclass of AbstractSetAttributesPlatformMessageHandler. (ICE-16045)
- Revise dependencies and bump versions. (ICE-16059)
- Add a “deletable” attribute to AssemblyPoint entity. (ICE-16043)
- Add a “deletable” attribute to ExternalServer entity. (ICE-16040)
- Remove the usage of KafkaMetrics. (ICE-15785)
- Update kafka mirrmaker API version. (ICE-16029)
- Setup Functional Tests For server-bridge. (ICE-15919)
- Add MELPe encoder values to allowed values. (ICE-16006)
- Remove userId from DefaultPrincipal (use entityId instead). (ICE-16004)
- Annotate all fields in XMLs with ‘optional’ parameter. (ICE-14627)
- Create new rallypoint agent. (ICE-15213)
- Replace Eclipse Annotations With Jetbrans. (ICE-15866)
- Prometheus Deployment strategy change. (ICE-15861)
- Codebase cleanup. (ICE-15865)
- Migrate AuthzMetrics to use PrometheusMetrics. (ICE-15813)
- Investigate Codahale To Prometheuse Adapter Issue. (ICE-15817)
- License file should be applied only in case it contains enough licenses for the blocks allocated. (ICE-15797)
- ReadinessProbePage Should Return True Only When All Components Are Started. (ICE-15743)
- Remove unnecessary abstract layer for Kafka topic filter and relevant code to reduce complexity. (ICE-15706)
- Prometheus doesn’t scrape kafka-exporter. (ICE-15802)
- Enable editing of expiration date and number of licenses for tactical license blocks. (ICE-15646)
- Refactor Service Registry Logic. (ICE-15742)
- SPIKE: Disable ice-certificate chart by default. (ICE-15734)
- Assess current Arcus implementation for supporting large participants. (ICE-15713)
- Cloud: Allow customer to change MinIO password. (ICE-12857)
- Cassandra: Re-preparing already prepared query. (ICE-15735)

- POC To Migrate to Consumer Group (Kafka). (ICE-15409)
- Create a data repair task to delete license blocks whose block expiration\_date has passed the current time. (ICE-15705)
- Create a wrapper CLI for EKS deployment using Terraform. (ICE-15217)
- Create MinIO cleanup job on /data/files bucket. (ICE-15086)
- Nginx Ingress Image change from WolfSS -> standart. (ICE-15691)
- Upgrade Kafka Client Version To 3.0.0. (ICE-15664)
- Remove duplicated tests from CreateNexedgeRadioTalkGroupTest and CreateP25ISSIGRadioTalkGroupTest. (ICE-15631)
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- Flaky Tests. (ICE-13642)
- Update MinIO Base Image. (ICE-13350)
- Support new license feature key “P25ISSI\_CHANNELS”. (ICE-15411)
- Add issig group tab to Oculus. (ICE-15455)
- Implement “base:GetAttributes” and “base:SetAttributes” for P25ISSIGRadioTalkGroup entity. (ICE-15392)
- Implement “issi:PageChannelsWithP25ISSIGRadioGroup” handler. (ICE-15394)
- Server to accept enterprise license. (ICE-15418)
- Add `chan:color` (string) property to channel model. (ICE-15245)
- Create support for rallypoint to be able to login into Arcus like external servers such as a patch agent or static reflector. (ICE-15212)
- Capture Prometheus metrics for user login/logout/disconnect count. (ICE-15136)
- APIs for P25 ISSI Group and association to channel. (ICE-14777)
- Enhance gateway reported status to include licensing issues. (ICE-15211)
- Implement “issi:PageP25ISSIGRadioGroups” handler. (ICE-15393)
- ICE OS Migration: 003 script should preserve the target cluster’s installation ID. (ICE-15184)
- ICE OS: Add interview question and screen to consume LDAPS server certificate. (ICE-13781)
- Capture caller’s phone number and type for incoming calls. (ICE-15383)
- End call for the user if the user session gets disconnected. (ICE-15016)
- Rename channel property ‘chan:userChanId’ to ‘chan:audioStreamId’. (ICE-15249)
- SPIKE: Create configmap reloader. (ICE-15381)
- Create Terraform for Azure AKS deployment. (ICE-15049)
- Upgrade Prometheus / Grafana operator to v8. (ICE-13069)
- SPIKE: Update ICE Cassandra chart to be compatible with 1.22 API. (ICE-15164)
- Create tests for StartupResourceCleaner. (ICE-15196)
- Create functional tests for tactical handlers. (ICE-15228)
- Implement REST endpoint for tactical license online deactivation. (ICE-15193)

- Add PrometheusDaoMetrics for Postgres DAO implementation classes. (ICE-15017)
- Terraform Initial & Grafana passwords output. (ICE-15198)
- Create Terraform for AWS EKS deployment. (ICE-15048)
- Remove inheritance in P25ISSIGRadioGroup XML definition. (ICE-15190)
- ICE OS Migration: Add check to make sure JQ is present during ICE OS migration. (ICE-15183)
- Add SRTP configmap to the ICE Telephony helm chart. (ICE-14914)
- Migrate LicenseFeatureAssignment table to Postgres. (ICE-15094)
- Implement ListLicenseFeatureBlockInfos API. (ICE-15096)
- Migrate LicenseFeatureBlockDAO To Postgres. (ICE-14969)
- APIs for P25 ISSI Radio System. (ICE-14771)
- Fix Functional Tests To Pass In Hybrid Mode. (ICE-14723)
- Server entities for ISSI. (ICE-14770)
- Cloud: Set Kafka PARTITION\_MEMBERS to 1 to all the containers. (ICE-14922)
- Tactical License Endpoints. (ICE-15034)
- Enhance Prometheus metrics being collected. (ICE-15018)
- Remove ResourceBundleDAO related code from all projects. (ICE-15036)
- Status attribute for KenwoodNexedgeRadioGroup needs to be updatable. (ICE-15027)
- Remove resource limit in Instant Connect Enterprise chart. (ICE-12859)
- Cloud: Spike: Update Strimzi Kafka pipeline. (ICE-12523)
- Configurable Attachment Download Link Expiration Time. (ICE-14958)
- Migrate ReflectionDAO To Postgres. (ICE-14967)
- Cloud: WolfSSL with Nginx-Ingress Controller. (ICE-13428)
- Implement Migrations For Person Related Tables To Postgres. (ICE-14976)
- Update “chan:CreateChannel” and “base:SetAttributes” for channel entity to set “chan:userChanId” to be the channel id if this attribute is null. (ICE-14874)
- Issue with serialization/deserialization of json Map object containing Date value. (ICE-14859)
- Implement PersonGroupDaoPostgres. (ICE-14663)
- Implement REST endpoint for tactical license offline activation. (ICE-14861)
- Migrate PersonElasticDAO To Postgres. (ICE-14722)
- Migrate TextMessageDAO To Postgres. (ICE-14661)
- Send AddPersons Event When PersonGroup Is Created. (ICE-14829)
- Replace PersonDAO.findByIdsIn() with EntityNameCache.getCacheEntriesByAddresses in handlers and managers. (ICE-14843)
- Server: Implement DAO layer for license block. (ICE-13082)
- Add associatedEntityAddress parameter to “txtmsg:ParticipantsAdded” and “txtmsg:ParticipantsRemoved” event. (ICE-14819)
- Migrate PersonDAO To Postgres. (ICE-14721)
- Implement Channel migration to Postgres. (ICE-14828)

- Migrate EventAuditLogDAO To Postgres. (ICE-14212)
- Update the test classes for all migrated DAO classes to include tests used by the Cassandra DAO classes. (ICE-14410)
- Server: Implement PatchDaoPostgres. (ICE-12037)
- Migrate TextMessageSessionDAO To Postgres. (ICE-14662)
- Configure Local Environment To Be Able To Connect To Postgres. (ICE-14727)
- Migrate ChannelDAO To Postgres. (ICE-14376)
- bump release version. (ICE-14789)
- Emit “chan:PersonAssignedToChannel” and “chan:PersonRemovedFromChannel” events when a person is added/removed from a PersonGroup that is associated with a channel. (ICE-14736)
- Platform Clean Up. (ICE-14086)
- Merge all Postgres related changes and test. (ICE-14488)
- Minor updates to PV monitoring dashboard. (ICE-14674)
- Remove property Channel.maxReplayTimeProp. (ICE-14504)
- Migrate WorkflowHistoryDAO To Postgres. (ICE-14226)
- FileData Support Elasticsearch Capabilities. (ICE-14414)
- Migrate SocketSessionDAO to Postgres. (ICE-14336)
- Fix AuditLog Functional Tests. (ICE-14625)
- Log audio alert related events in Audit Log. (ICE-14440)
- Create daily cleanup job to purge old cluster logs on MinIO. (ICE-14479)
- Update the ksql/mirrormaker2 dependency. (ICE-12844)
- Migrate WebhookHistoryDAO To Postgres. (ICE-14228)
- Populate ELASTICSEARCH\_MODELMANAGER\_INDEX\_REPLICAS env in Arcus. (ICE-13722)
- Migrate LicenseFeatureDAO To Postgres. (ICE-14346)
- Add zfs partition monitoring dashboard in Grafana. (ICE-14363)
- Migrate AssociationDAO To Postgres. (ICE-14211)
- Support Audio Alerts For WFA. (ICE-14445)
- Migrate WorkflowDAO To Postgres. (ICE-14225)
- Update MinIO [nginx.org/client-max-body-size](https://nginx.org/en/client_max_body_size.html) default to 16Mb. (ICE-14434)
- Migrate AbstractSessionDAO to Postgres. (ICE-14188)
- Update Cornea JS: allow getting error codes from Arcus. (ICE-13759)
- Implement “licblk:ReleaseLicense” API. (ICE-13754)
- Migrate WebhookDAO To Postgres. (ICE-14227)
- Migrate LicenseDAO To Postgres. (ICE-14345)
- Update CreatePersonHandler to allow “person:transmitPriority” to be included. (ICE-14350)
- Set up Functional Tests To Work In Hybrid Mode. (ICE-14171)
- Implement “licblk:GrantLicense” API. (ICE-13753)



- Migrate JobDAO To Postgres. (ICE-14172)
- Migrate AppHandoffDao To Postgres. (ICE-14148)
- Revert Cornea.js breaking changes. (ICE-14175)
- Create MinIO migration scripts. (ICE-14173)
- Set Up Postgres Model Manager. (ICE-14090)
- Add an optional “expirationTime” parameter to “file:CreateFileData” request. (ICE-14122)
- Optimize/Refactor LicenseManager.getLicenseInfo(). (ICE-14102)
- Restructure license\_feature\_assignment table to accommodate license block id. (ICE-13978)

## 2 Fixes

These issues have been resolved in this version of the product:

- ICE Server’s Grafana should not send analytics information. Discovered in 3.1.2. (ICE-16992)
- Geo: Elastic sync issue across 2 datacenters. Discovered in 3.1.1. (ICE-16855)
- Cloud: Change Cassandra logging level. Discovered in 3.1.0. (ICE-13629)
- Template icelIngress chart’s registry and image values for release installation. Discovered in 3.1.1. (ICE-15654)
- Address Sonar-found issues. Discovered in 2.0.0. (ICE-1068)
- Elastic Search doesn’t return configured AD user if it has T1 or T2 Prefix. Discovered in 3.1.1. (ICE-16214)
- ICE Server upgrade takes too long due to elastic model manager slowness. Discovered in 3.1.1. (ICE-15362)
- Cloud: Change default docker name of ‘engagebridge’. Discovered in 2.0.0. (ICE-5064)
- Desktop: Messaging->list shows User Group that was deleted; needs app logout and relogin to see it updated. Discovered in 3.1.1. (ICE-14708)
- Use a standard certgen webhook image for WolfSSL Nginx-Ingress controller. Discovered in 3.1.1. (ICE-15614)
- ICE OS Migration: Must check for helm repo’s existence at start of 004 script. Discovered in 3.1.1. (ICE-15185)
- Licenses leakage for Patch admin and WFA admin after server outage. Discovered in 3.1.0. (ICE-15187)
- txtmsg:ListTextMessageSessionsForEntity request returns same entity multiple times. Discovered in 3.1.1. (ICE-14851)
- “txtmsg:ParticipantsAdded” is not emitted to the user that is just added to the PersonGroup associated with a Text Message Session. Discovered in 3.1.1. (ICE-14820)
- Flutter: LDAP users are not displayed on the people tab and map for assigned channels. Discov-

- ered in 3.1.0. (ICE-14659)
- [UserGroup] Add/Remove users to the existing Group should affect associated assigned channel. Discovered in 3.1.0. (ICE-14380)
- Audio alert sent from desktop is not played on Cisco LMRG donor Radios. Discovered in 3.1.0. (ICE-14682)
- Fix Job For Minlo Clean Up. Discovered in 3.1.0. (ICE-14499)
- Geo Setup : Observed 2 alerts coming (instead of 1) on both Flutter & DC clients for a single on date/time WFA rule. Discovered in 3.1.0. (ICE-14430)
- PersonGroupRemovedFromChannelEvent is not getting emitted to the person in the PersonGroup removed from the channel. Discovered in 3.1.0. (ICE-14394)
- chan:Remove sometimes does not remove FixedStation association. Discovered in 3.1.0. (ICE-13684)

### 3 Known Issues

These are issues known to exist in the product:

**3.0.1 Default Rallypoint selections (made in ICE Desktop > Settings > Channel) may be cleared after an ICE Server upgrade. This will result in intercom channels and private calls created after the upgrade from functioning. (ICE-10332)**

**3.0.1.1 Conditions** This occurs when ICE Server is upgraded to version 2.2.0.

**3.0.1.2 Workaround** After upgrading ICE Server, an ICE administrator should review the Channel default settings to assure a valid Rallypoint has been selected for assigned channel, intercom channel, and telephony defaults.

**3.0.2 IP Phone usage on the license management page may be inaccurate after a server upgrade or reboot. (ICE-8458)**

**3.0.2.1 Conditions** If a user remains logged in (i.e., does not logout, so the session continues) to the ICE IP Phone XML client prior to a server upgrade or reboot, then on their next login that user may take up multiple licenses for the session.

### 3.0.3 Deleting a static reflector from ICE Desktop does not cause the reflector to shut down or otherwise stop operating. (ICE-8405)

**3.0.3.1 Workaround** To stop the reflections provided by the reflector, system administrators should stop the reflector process (by killing its Docker container) prior to deleting the reflector in the ICE Desktop application.

**3.0.3.2 Additional information** When a static reflector has been deleted for ICE Server, the reflector process associated with the deleted entry “coasts”, i.e., the reflector continues to operate in whatever state and configuration existed at the moment of deletion. It will receive no further configuration updates from the server, but will not automatically terminate, either.

### 3.0.4 The Cassandra Kubernetes pod restart count continuously increments after a fresh installation or upgrade of ICE Server, but there is no loss in service. (ICE-6576)

**3.0.4.1 Conditions** This occurs only after performing an ICE Server installation onto a Kubernetes cluster or upgrading an existing system in a geographically-redundant configuration. This problem is not seen on single-site deployments (single-node or multi-node).

It affects systems whose link between data centers is slow enough that database schema updates take longer than the built in timeout allows for. A slow persistent storage system—or one under heavy load—may manifest this issue, too.

**3.0.4.2 Workaround** Run these commands in `cqlsh` (replacing `dc` and `replica` values as appropriate):

```
DROP KEYSPACE reaper_db;
CREATE KEYSPACE reaper_db
  WITH REPLICATION = {
    'class' : 'NetworkTopologyStrategy',
    'dc1' : 1
  };
```

Allow the reaper to finish its schema updates, then in `cqlsh`:

```
ALTER KEYSPACE reaper_db
  WITH REPLICATION = {
    'class' : 'NetworkTopologyStrategy',
    'dc1' : 1,
    'dc2' : 1
  }
```

Finally, on each node in `dc2`, run `nodetool rebuild - dc1`

### **3.0.5 Poor audio quality is observed when an ICE user calls another ICE user through a PSTN “dial call”. (ICE-4027)**

**3.0.5.1 Conditions** When two users are assigned dial numbers and one user dials another user’s device through the soft-phone feature in the app, the established call will exhibit lower audio quality than expected.

This issue is not exhibited when a user makes a “private call” to another user. Only user-to-user calls placed by dialing a phone number are subject to this limitation.

**3.0.5.2 Workaround** Instant Connect users should call each other through the private calling mechanism by searching for the user’s name in the directory and clicking the adjacent telephone icon.

**3.0.5.3 Additional information** This issue is caused by double-encoding “loopback” audio traffic as it enters and leaves the ICE Telephony system.

This document describes changes introduced between build cc725d2 to 990dd9a.