



ICE Server 3.1.0

Release notes for prerelease

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1 New & Improved

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

- Optimize/Refactor `LicenseManager.getLicenseInfo()`. (ICE-14102)
- Update Rallypoint pod names to include the multi-datacenter setting. (ICE-13459)
- Investigate a code level fix for this “Connection reset by peer” error from `RestHighLevelClient`. (ICE-13752)
- Inject ICE Gateway log level env var into the gateway helm chart. (ICE-13769)
- Implement `GetCurrentLicenseConsumersHandler` to support “licblk:GetCurrentLicenseConsumers” request. (ICE-13738)
- Cloud: Upgrade k8s Arcus workloads from API batch/v1beta1 to batch/v1. (ICE-13679)
- Server: Make `featureKey` attribute in `LicenseFeature` type an enum type to provide auto validation. (ICE-13602)
- Add thread name/id to the elastic log messages. (ICE-13770)
- Update Instant Connect Enterprise pod names to include the multi-datacenter setting. (ICE-13458)
- Server: Implement `DeleteLicenseFeatureBlockHandler` to support “licblk:Delete” request. (ICE-13308)
- Server: `PersonGroupService` add search endpoint. (ICE-13721)
- Investigate Elasticsearch connection issue. (ICE-13475)
- Server: Create a data repair job (to be run standalone) that can sync event audit log data from Cassandra to Elastic for a configurable date range. (ICE-13613)
- Server: Support `ELASTICSEARCH_MODELMANAGER_INDEX_REPLICAS` ENV variable in `elasticsearch-modelmanager`. (ICE-13575)
- Server: Implement `CreateLicenseFeatureBlockHandler` to support “licblk:CreateLicenseFeatureBlock” request. (ICE-13307)
- Cloud: Update liveness probe and readiness probes for ICE Gateway chart. (ICE-13668)
- Server: Update `txtmsg:addTextMessageMessage` to allow `textContent` as an empty string. (ICE-13673)
- Server: Make sure `GetAttributes` and `SetAttributes` works for `LicenseFeatureBlock` entity. (ICE-13310)
- Update `AuditLogDataMigrationStrategy` to only sync data for a configurable number of days including today. (ICE-13611)
- Server: Add a tab in `oculus` for `LicenseFeatureBlock` entity. (ICE-13311)
- Server: Implement “licblk:ListLicenseFeatureBlocks” request. (ICE-13563)
- Migrate rest-bridge handlers to `AsyncHttpResource`. (ICE-13464)
- Server: Implement `PageLicenseFeatureBlocksHandler` to support “licblk:PageLicenseFeatureBlocks”

- request. (ICE-13309)
- Server: Implement DAO layer for license block. (ICE-13082)
- Update ElasticsearchDaoException log format to fit Loki. (ICE-13527)
- Cloud: ICE OS: Create new helm chart for ICE Telephony deployment. (ICE-11214)
- Server: Code clean up. (ICE-13507)
- Fix PersonGroup Tab In Oculus. (ICE-13508)
- Server: Set Up Functional Tests For rest-bridge. (ICE-13290)
- StartPlatformComponents issue. (ICE-13480)
- Server: Design license block concept. (ICE-13080)
- Add text messaging module to load test tool. (ICE-13444)
- Restore SocketSession entry in socket_session table if missing during pingpong interaction between the client and Arcus. (ICE-13454)
- Cloud: Configure Nginx so that the client's real IP address is in the request header. (ICE-13112)
- Server: Add event data to the workflow history table. (ICE-13438)
- It would be nice if Voice port usage in license page can display channel names along with DNs used. (ICE-13179)
- Add CDR module to load test tool. (ICE-13434)
- Update load test code to handle TALK_DURATION = 15 sec. (ICE-13297)
- Server: Modify RestfulApiAuthorizer test. (ICE-13288)
- Add radio duty cycle algorithm to load-test. (ICE-13296)
- Server: Change displayed webhook url to use /instant-connect/ instead of /rest/. (ICE-13370)
- Server: Improve WebhookManager -> execute. (ICE-13291)
- Server: Ability to generate dynamic URI for the outbound webhook. (ICE-13171)
- Cloud: Spike: Expand rest-bridge's Ingress path. (ICE-13372)
- Server: Clean Up Copy logback.xml logic. (ICE-13292)
- Cloud: Ingress-Nginx watch ingresses without class. (ICE-13251)
- Server: Move business logic from 'client-bridge' to 'platform-services'. (ICE-3873)
- Server: Update RestfulApiAuthorizer to allow the authorization token value to be embedded in the Http body instead of the "authorization" header. (ICE-13067)
- Arcus: Automatically delete intercom channel when only one participant remains. (ICE-13138)
- Remove jcenter() dependency from codebase. (ICE-13141)
- Server: Implement PagePersonGroups handler. (ICE-12908)
- Server: Convert existing subclasses of LocalEventObserver to ApplicationEventListener classes like PersonApplicationEventListener. (ICE-13020)
- Add metric library to Cornea for Dart. (ICE-12988)
- Cloud: Add ENV Variable To Control ROOT Logger Level. (ICE-12926)
- Server: POC for internal Notifier. (ICE-12455)
- Server: Persist audit log data in Cassandra. (ICE-12785)

- Server: ListAvailableChannels Should Take Into Account Person Groups. (ICE-12909)
- Server: Add TextMessageSessionInfo To ParticipantsAdded Event. (ICE-12891)
- Server: Copy logback.xml to extra-directory. (ICE-12874)
- Server: Functional tests for Platform Client. (ICE-12827)
- Cloud: Spike: Update Elastic Exporter pipeline. (ICE-12526)
- Cloud: Update Cert manager. (ICE-12649)
- Cornea: Add new header to cornea Websocket headers. (ICE-12871)
- Server: ListTextMessageSessionsForEntity. (ICE-12865)
- Server: Create audit log anytime someone is trying to access an unauthorized operation. (ICE-12738)
- Server: Fix Flaky Tests. (ICE-12855)
- Server: [Alerts] Add 'RespondAllAlerts' endpoint. (ICE-12810)
- Cloud: Geo: Improve MinIO Mirroring initialization process. (ICE-12837)
- Server: [Alerts] Modify 'alert:ListAlertsForPerson' and 'alert:ListAlertsForEntity' to return last 100 Alerts. (ICE-12809)
- Server: Add Handler For channel ListPersonGroups. (ICE-12831)
- Server: Implement ElasticEventObserver For Person Group. (ICE-12824)
- Server: Create PersonGroup Index in Elastic. (ICE-12781)
- Server: Type Inheritance From Capability. (ICE-12767)
- Server: Add Get/Set Attributes Handlers For PersonGroup. (ICE-12784)
- Cloud: Remove Static Reflector & Patch Server pod's dependency on develop pipeline's arcus post-install image. (ICE-12735)
- Cloud: Upgrade Nginx-Ingress chart to v1.0.0. (ICE-12417)
- ICE audit log must show failed login attempts. (ICE-12723)
- Add client IP address to the com.iris.bridge.server.session.Session upon login. (ICE-12721)
- Server: Fix ListTextMessageSessionsForEntityHandler. (ICE-12750)
- Server: Return Last Text Message For Session. (ICE-12697)
- Server: Bump Log4j version to 2.15.0. (ICE-12743)
- Server: Suggest a way to suppress the errors causing by any elastic related operations by a System user. (ICE-12522)
- Server: Fix MessageTypeAdapter. (ICE-12742)
- Server: Persist Connection URL in Session. (ICE-12696)
- Cloud: Enhance Request Max Size Management. (ICE-12693)
- Server: Send "ParticipantsAdded"/"ParticipantsRemoved" session events after the user was added to / removed from the channel. (ICE-12597)
- Add EventProcessor classes and PersonGroupBasedMessageSender on client-bridge. (ICE-12667)
- Server: Add Metrics API To Server Bridge. (ICE-12672)

- Cloud: Bake engage-cmd into Platform Services Docker container. (ICE-8114)
- Server: Add a chan:userChanId field to the channel model. (ICE-9888)
- Arcus: Upgrading ixwebsocket 3rd party library. (ICE-12670)
- Server: Update “txtmsg:ListTextMessageSessionsForEntity” request for a person. (ICE-12631)
- Server: Update TextMessageSessionEventManager to include PersonGroup addresses as the group addresses in the PlatformMessage. (ICE-12473)
- Server: Functional Tests For Channel Entity. (ICE-11084)
- Cloud: Flux Helm Operator Upgrade. (ICE-12508)
- Cloud: Elasticsearch Operator Upgrade. (ICE-12633)
- Cloud: Update Ingress workloads to work with K8s v1.22+. (ICE-12641)
- Server: Update CreateTextMessageHandler to allow associatedEntities parameter containing a list of Person and PersonGroup addresses. (ICE-12529)
- Server: Refactor RoleManager to use RoleContext instead of ad hoc parameters. (ICE-12428)
- Refactor Abstract*FunctionalTest to remove duplicated logic. (ICE-12530)
- Server: Update CreateTextMessageSessionHandler to allow associatedEntities parameter containing a list of PersonGroup addresses. (ICE-12471)
- Server: Log Message PlaybackCommandLauncherProvider. (ICE-12503)
- Server: Add reportPresenceLocation property to person model. (ICE-12422)
- Server: Enhance ElasticDaoException With Operation Context. (ICE-12475)
- Cloud: Update Ingress for ICE Desktop Chart. (ICE-11292)
- Server: Refactor WebhookManager to use WebhookContext instead of ad hoc parameters. (ICE-12427)
- Server: Clean up arcus-lib. (ICE-12424)
- Better functional test coverage for Manager layer classes. (ICE-12390)
- Server: -999.999 lat/lon flag. (ICE-12396)
- Server: actorName is empty for Create Alert Audit Log Event. (ICE-11230)
- Server: Refactor PersonGroupManager to use PersonGroupContext instead of ad hoc parameters. (ICE-12393)
- Server: Add generated constant for ‘defaultValue’. (ICE-12385)
- Cloud: Remove Multicast Range related logic from pipeline. (ICE-11819)
- Server: Implement attachments related logic. (ICE-11491)
- Server: Remove Multicast API. (ICE-12038)
- Server: Update “chan:ListPersons” and “chan:ListClients” API to take into considerations of the persons in the PersonGroups assigned to the channel. (ICE-11834)
- Cloud: Update Elastic Search sync jobs. (ICE-12045)
- Server: Create Generic File Clean Up Task. (ICE-12039)
- Server: Implement Elasticsearch Sync Job. (ICE-12020)
- Server: Implement P25CryptoKeyDaoPostgres. (ICE-12036)

- Server: Create Postgres DAO for Dial Number (DialNumberDAO). (ICE-11149)
- Update “chan:GetParticipantCounts” to take into consideration of the persons in a personGroup assigned to the Channel. (ICE-11835)
- Server: Revise Logging. (ICE-10704)
- Server: Replace multicast service with random group/port selection. (ICE-10091)
- Server: Create NexedgeRadioGroupDaoPostgres. (ICE-11820)
- Update ChannelAssociationManager to emit PersonGroupAssignedToChannel and PersonGroupRemovedFromChannel events when PersonGroups are assigned/removed from channel. (ICE-11833)
- Server: File Data Expiration Time. (ICE-11490)
- Update Session’s EventSubscription based on a person’s userGroups in client-bridge. (ICE-11469)
- Create functional test for “chan:AssignPersonGroupsToChannel” and “chan:RemovePersonGroupsFromChannel”. (ICE-11165)
- Cloud: Adjust max file size allowed for MinIO upload. (ICE-11297)
- Server: Import LDAP server cert into Java truststore for enterprise CA authentication. (ICE-11226)
- Server: Text Message With Attachment Api. (ICE-11475)
- Server: Implement Postgres ExternalServerReportDAO. (ICE-11283)
- Server: Add Text Message Attachment Expiration. (ICE-11474)
- Server: File Data API adjustment for Audio Alerts. (ICE-11300)
- Server: Add TextSession tab to Oculus. (ICE-11270)
- Server: Implement “persongroup:PagePersonGroups” request defined in PersonGroupService. (ICE-11247)
- Server: Refactor DialNumberDAOImpl. (ICE-11170)
- Upon session login, update the EventSubscription stored in bridge session based on the user groups the person belongs to. (ICE-11184)
- Update LDAPAuthenticationSource to only use the configured service account for LDAP authentication when going through the PIV CAC login. (ICE-11222)
- Server: Cover Dial Number Functionality With Functional Tests. (ICE-11169)
- Emit “base:Added”, “base:Deleted”, “base:ValueChanged” events when person group is created, deleted or updated. (ICE-11179)
- Update “persongroup:AddPersons” and “persongroup:RemovePersons” to emit PersonsAssignedToPersonGroup event and PersonRemovedFromPersonGroup respectively. (ICE-11166)
- API changes for PersonGroupService and PersonGroup capabilities. (ICE-11183)
- Server: Create Postgres DAO for CiscoIpPhone (CiscoIpPhoneDAO). (ICE-11119)
- Server: Replace @Configuration. (ICE-11176)
- Cloud: Disable ICE Desktop chart by default in ICE 3.0. (ICE-11194)

2 Fixes

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

- Cloud: Change Swagger logging level. Discovered in 3.1.0. (ICE-13631)
- Cloud: Change Kafka logging level to warning. Discovered in 2.2.0. (ICE-13628)
- Cloud: Graphana: ICE Cluster Resource Status dashboard, some panels are missing data or query incorrect. Discovered in 2.2.1. (ICE-13633)
- Cloud: Change logging level for Rallypoint, Static Reflector and Patch Server. Discovered in 3.0.0. (ICE-13630)
- Cloud: ICE Monitoring Chart's Loki ignores retention period. Discovered in 2.2.0. (ICE-13485)
- Cloud: Geo: Call detail records (CDRs) are not synchronized between data centers. Discovered in 2.2.0. (ICE-10340)
- ICE-M: Error should be explanatory if user has not installed Self signed certs on the device. Discovered in 3.0.0. (ICE-10689)
- Agents fail to reestablish connection to Arcus after socket session timeout. Discovered in 2.0.0. (ICE-13378)
- Flutter iOS: Intermittently, app does not automatically re-login after a force quit. Discovered in 3.0.0. (ICE-12665)
- Server: The text messaging chat can be continued with deleted user and channel. Discovered in 3.0.0. (ICE-9968)
- Cloud: Geo: Static Reflector & Patch Server status for peer center is incorrect. Discovered in 2.0.0. (ICE-11808)
- Cloud: Add ICE Rallypoint Nginx dashboard for 3.1. Discovered in 3.0.0. (ICE-12941)
- Arcus jobs fails reinstall due to job hook-delete-policy. Discovered in 2.0.0. (ICE-12854)
- Server: Search isn't working consistently. Discovered in 2.0.0. (ICE-5089)
- Cloud: Report invalid NIC specification when starting static reflector pod. Discovered in 2.0.0. (ICE-12729)
- Server: Deleting channel if patch has less than 2 channels. Discovered in 3.0.0. (ICE-12627)
- Cloud: Fix startPlatformComponents Command. Discovered in 3.0.0. (ICE-12752)
- Oculus: the "search" button on the "PersonList" panel does not work. Discovered in 3.0.0. (ICE-12621)
- Desktop: Error message on trying to enable on the date/time type of workflows which are set on the date in the past. Discovered in 3.0.0. (ICE-11794)
- Cloud: Update Rallypoint chart's cornea library version to 3.0.0. Discovered in 2.2.0. (ICE-9351)
- Server should give duplicate error if channels have same name and same multicast Tx/Rx address/port. Discovered in 3.0.0. (ICE-11815)
- Cloud: Default Pods Aggregated View dashboard not working correctly. Discovered in 3.0.0.

(ICE-11812)

- Server: When creating a patch using the “Create and Activate” command in ICE Desktop, sometimes the patch will not function. Discovered in 2.1.0. (ICE-8561)
- Server: Send ValueChange Event To Actor and Mutated Person. Discovered in 3.0.0. (ICE-11258)
- base:ValueChange format does not correct. Discovered in 3.1.0. (ICE-11243)

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 b7dc0f1 to cc725d2.