

# ECONTACT ROADMAP 2017-2019

## INTRODUCTION

This is a roadmap for eContact software planning, development, testing, deployment, training, and support from 2017 to 2019. It is a planning guide for allocating and scheduling resources, setting deadlines, and communicating within our teams and to all stakeholders across the Department.

Because it crosses fiscal years, this roadmap assumes resources that are not yet confirmed, specifically, additional qualified programmers, training course coordinators, deployment coordinators and additional qualified help desk support (Note: additional adjunct trainers onboarding started July 2017). If not available from existing full time RSC staff, then potential alternative sources are identified explicitly.

## EXECUTIVE SUMMARY

The goal of eContact is to provide better software than the 20-year old legacy Contact Management Database used in EUR-IO to manage official contacts and events necessary in the conduct of diplomacy. Better means a modern web-based application that is more secure, easier for practitioners to learn and use, easier for IT staff to maintain and update, and allows for the addition of long-requested features such as online check-in.

To achieve that goal we will assign our most qualified software developers, use the best available technology and methodology for system design, consult extensively with practitioners who manage official contacts and events at posts in the region, and smoothly integrate the product into their workflow, including data migration, training, and help desk support.

To measure that goal we will evaluate customer satisfaction at each critical decision point during planning, design, training, deployment and long term support. Practitioners and subject matter experts, as the end-users, are essential to validating whether eContact has met the stated goal.

eContact has now been deployed to 45 posts. 24 posts used eContact to manage their 2017 Independence Day event. RSC then conducted a targeted survey and a separate focus group following these Independence Day events. The results indicated that while eContact can support events and already includes some features that CMD lacked, end users were not satisfied with eContact's speed and responsiveness in day-to-day use, and noted it was missing important features like seating charts. Some users, particularly long-time users of CMD, did not like the user interface (UI) among other complaints, which in the aggregate, reflected a user experience (UX) that fell short of that which they had with CMD.

In August 2017, RSC paused development of further requested features in August, 2017 pending refactoring of the underlying code to improve performance and allow for faster development of additional requested functionality in the future, including migration to a cloud service provider. Two additional qualified full time programmers have been allocated to eContact for six months. This roadmap takes into account those additions to the team, as well as key events, normal leave patterns, and other resource constraints.

RSC will continue deployments to EUR-IO posts that are willing to proceed with data migration and training staff on eContact. At-post trainings and seats should be prioritized to posts already using eContact in production to manage contacts and events, with lower priority to posts that are still in "wait and see mode." This can be evaluated numerically based on number of records in posts' respective eContact databases. The pending eContact at-post training requests have been scheduled through the end of 2017, and four additional Frankfurt eContact training classes have already been scheduled for 2018, along with sufficient adjuncts available to hold one at-post eContact training course per month during 2018 (dates and locations TBD).

## THE WAY FORWARD: UPDATES AND DEPLOYMENTS

Based on the planning, development, training, deployment and support experiences to date, in order to reach our goal and be ready for further deployment, RSC must reach several specific eContact milestones:

## RELEASE ECONTACT VERSION 1.1

The current release of eContact will be finalized at version 1.1, with no other major updates planned beyond critical bug fixes preventing basic functionality, causing data loss, serious security issues, etc. This work is ongoing, including functional testing with practitioners in the field. The target date to complete all work, testing, and release version 1.1 is January 30, 2018. This date is meaningful to avoid changing the production system during preparation for Independence Day 2018 at posts in the region.

## REFACTORING

eContact developers must rewrite significant portions of the eContact code base to improve performance, reliability, and compliance with Application Development Group (ADG) standards. This will also facilitate and standardize future maintenance. This rewrite, called refactoring, will focus on underlying code, with a specific goal to avoid any unnecessary changes to the user interface, terminology and functionality upon which scores of post practitioners have already been trained. Refactoring will commence in February, 2018 and will end June, 2018, resulting in a release candidate for our next version, eContact 2.0 (Cloud).

## DESIGN, DEVELOP AND RELEASE SEATING CHARTS MODULE

A fully tested and validated seating charts module, which can be completed concurrently with refactoring, is the last remaining major functional component of eContact demanded by posts. This will be completed for the eContact 1.1 release in January, 2018.

## EXPAND EUR-IO TRAINING

With the addition of 7 newly trained adjunct trainers, to the previous cadre of 5 in EUR-IO, we will be able to offer more classroom training in Frankfurt and at posts. Based on previous requests and new adjuncts, we should plan to offer 16 trainings during 2018 (1-2 per month) in the region.

## COMPLETE EUR-IO DEPLOYMENT

During refactoring work, deployment and support specialists can continue working with remaining EUR and IO posts that are still using CMD to migrate to eContact in anticipation of the eContact 1.1 release in January, 2018. Some remaining CMD posts have contacted RSC to deploy eContact while previous training of staff remains fresh in mind. With current deployment team members, we can easily complete 2 deployments per week (this is a fraction of our peak workload of deployments in early 2017). See the EUR-IO Deployment Methodology/Package for 5 phase deployment to remaining CMD posts.

#### ECONTACT 2.0 IN THE CLOUD:

The current CMD development and support cost sharing agreement (MOU) with other regions extends “through FY-2018.” RSC should work to sunset CMD as soon as possible, to lower the risk that significant programming or configuration work might be required to make it compliant with future OpenNet requirements.

Both CMD and eContact currently suffer from several risks running on the OpenNet. These include performance degradation, OpenNet security restrictions, limited access to non-State mission staff, and limitations on features such as mobile access and online RSVP tracking.

Additionally, ADG has gained extensive experience designing, developing, testing, training, and supporting web-based applications in the Microsoft Azure Commercial Cloud (aka MS Azure) which is FISMA Moderate rated by GSA FedRAMP to meet federal IT standards for protection of data at a level similar to OpenNet which stores SBU and PII. For comparison, the Foreign Affairs Network was recently also granted authority to operate at the FISMA Moderate level and to process SBU and PII data.

In order to support eContact worldwide, as well minimize costs of equipment and software licensing, deployment to other regions should only be conducted after eContact 2.0 (Cloud) is released. Until 2.0 (Cloud) is released, EUR should seek to extend the current agreement for CMD support to other bureaus under similar terms to those existing now. Until we can deliver a new product, we will not cut-off support nor increase costs associated with eContact development and operation. There are, however, increasing risks to continuing support for CMD including unforeseeable security and configuration incompatibilities mandated by the Department or other authorities.

The biggest challenge for moving eContact to the cloud is the highly complex Department approval process. However, ADG now has a specialist dedicated to coordinating and monitoring the compliance process for all ADG applications and this process can be carried out simultaneously to the software development work.

The target timeline for a functional product eContact 2.0 (Cloud) is September 2018. This timeline covers all development work and practitioner review, production of additional training and self-help resources, deployment planning, and compliance process to receive an authority to operate (ATO) documenting eContact 2.0 (Cloud) approval by the Department. However, this timeline is aspirational and based on our current best estimate of resources available and difficulty of the task. We operate in a highly complex, resource-uncertain environment, so we must closely track the target and adjust timelines based on newly-received information.

## EUR-IO DEPLOYMENT METHODOLOGY/PACKAGE

### REMAINING EUR-IO POSTS WILL BE SCHEDULED FOR 5 DISTINCT PHASES OF DEPLOYMENT:

- 1) Post technical POC selects deployment date/time slot on our scheduling site.
- 2) RSC confirms functional and technical POCs. Additional training may be recommended or scheduled by RSC, prioritized to job function, post size, etc.
- 3) RSC deploys post data from CMD to eContact on the selected date/time, post shuts down CMD.
- 4) RSC confirms data consistency with functional and technical POCs and ensures any follow-up needed to fine-tune data imported to eContact.
- 5) RSC follows up to check-in with post via conference call to confirm satisfaction with deployment.

## TIMELINE

### JULY 2017

- 18th - Webinar held with eContact posts to share survey results.
- 28th - eContact minor update published.

### AUGUST 2017

- 21st - Migrate eContact to SQL 2012 server for better performance.
- Formalize work plan for Seating Chart module, assistance from Jerusalem developer.
- 2-hour webinar with eContact practitioners group to refine feature request backlog.
- Plan and schedule at-post trainings and EUR waiver post deployments.

## SEPTEMBER 2017

- 2 FT developers plan for refactoring eContact codebase to increase performance and reliability. Plan for integration of new contract developers surge.
- ADG Quality Assurance (QA) team testing eContact code and interface during refactoring.
- 2 EUR eContact trainings.
- Deploy eContact to 6 EUR CMD posts (1-2 per week).

## OCTOBER 2017 (1 FT DEVELOPER ON PARENTAL LEAVE)

- 1 FT developer continues to resolve pending backlog issues with eContact codebase to increase performance and reliability.
- 2 EUR eContact trainings.
- Deploy eContact to 6 EUR CMD posts (1-2 per week).

## NOVEMBER 2017 (2 FT DEVELOPERS ON PARENTAL LEAVE)

- 1 FT developer hands off pending backlog issues with eContact codebase to contract surge developers.
- 2 EUR eContact trainings. Provide RSC/TD estimated CY 2018 trainings.
- Deploy eContact to 6 EUR CMD posts (1-2 per week).

## DECEMBER 2017 (1 FT DEVELOPER ON PARENTAL LEAVE)

- Dev team finalizes next update to eContact 1.1 for January update.
- Prepare docs for CCGB eContact 2.0 (Cloud).
- 1 EUR eContact training.
- Deploy eContact to any remaining EUR CMD posts (1-2 per week).

## JANUARY 2018 (1 FT DEVELOPER ON PARENTAL LEAVE)

- Dev team publishes eContact 1.1 to staging and plans refactoring of eContact codebase for eContact 2.0 (Cloud).
- ADG Testers and practitioners review eContact 1.1 in staging prior to publishing to production (webinar).

- Complete CCGB docs for eContact 2.0 (Cloud) approval.
- 2 EUR eContact trainings.
- eContact 1.1 released to production – no other changes to production until eContact 2.0 (Cloud) is released.

#### FEBRUARY 2018 (1 FT DEVELOPER ON PARENTAL LEAVE)

- Dev team begins refactoring eContact codebase.
- Submit CCGB docs for eContact 2.0 (Cloud) approval.
- 2 EUR eContact trainings.
- Initiate discussion of cost-sharing and support-sharing agreement with other regions for FY 2019.

#### MARCH - APRIL 2018 (1 FT DEVELOPER ON PARENTAL LEAVE)

- Dev team continues refactoring eContact codebase.
- ADG Quality Assurance (QA) team and practitioners review refactoring improvements (monthly webinar).
- Monitor CCGB approval process for eContact 2.0 (Cloud) towards ATO.
- EUR eContact trainings as scheduled with RSC/TD, fulfill post requests as needed.

#### MAY - JULY 2018

- Contract developers surge ends.
- Product team focuses on support and training materials for eContact 2.0 (Cloud), early adopter eContact 2.0 (Cloud) posts functional testing in and outside of EUR.
- Plan EUR managed eContact 2.0 (Cloud) deployment to be conducted October-December 2018.
- Complete ATO tasks (i.e. independent assessment) and confirm CCGB process nearing completion.

#### AUGUST - SEPTEMBER 2018

- Full ATO received for eContact 2.0 (Cloud).
- ADG starts to onboard EUR early adopter posts to eContact 2.0 (Cloud)
- Discuss and plan for deployment in regions beyond EUR. Deployment to other regions will only proceed after 2.0 deployment to EUR is complete and assessed as satisfactory,

and a new cost-sharing agreement is in place that includes the true costs of eContact O&M, including training.

#### OCTOBER - DECEMBER 2018

- Final ATO received for eContact 2.0 (Cloud).
- ADG-managed deployment to EUR posts to eContact 2.0 (Cloud).
- 3 month managed deployment with assistance from eContact product team.

#### JANUARY - MARCH 2019

- Assessment of EUR deployment
- Troubleshooting and follow-up of any post-deployment issues

#### AUGUST – DECEMBER 2019

- Begin managed deployments of eContact 2.0 (Cloud) to other regions (2 per week).
- Convene practitioners to set goals of eContact 3.0.