

To: UC Programme Board Members **From: Craig Eblett**
Sponsor: Ian Wright
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Date: 17 June 2017

Paper Title: Universal Credit Full Service: Dependencies across Digital Group

Issue:

Achieving UC Programme outcomes is dependent on a "whole DWP" approach including delivery from various departmental functions, including Digital Group. This paper sets out the key dependencies with Digital Group and their status from the perspective of the programme. Section 1 describes the ways in which the UC Programme is dependent on Digital Group as UC Full Service is a collection of integrated Digital products, platforms, shared services and data. Section 2 then describes the ways in which these dependencies are managed and section 3 provides a status summary of these dependencies.

Recommendations/Decisions required:

UC Programme to report monthly against each of these dependency areas in the run up to October 2017 scaling, with specific areas of note being explicitly brought to the attention of Board members.

Timing:

Recommendation is that a summary of each area of dependency is given at each Programme Board building towards scaling of UC Full Service in October 2017.

Introduction

1. Universal Credit Programme delivers in the context of DWP

The Universal Credit Programme brings together capabilities from across DWP to deliver its objectives. The Digital products and services underpinning the UC Full Service provide one focal point for the Programme’s dependencies on wider DWP.

This paper provides a summary of these dependencies as well as an assessment of the risk to the programme’s attainment of its goals if not met.

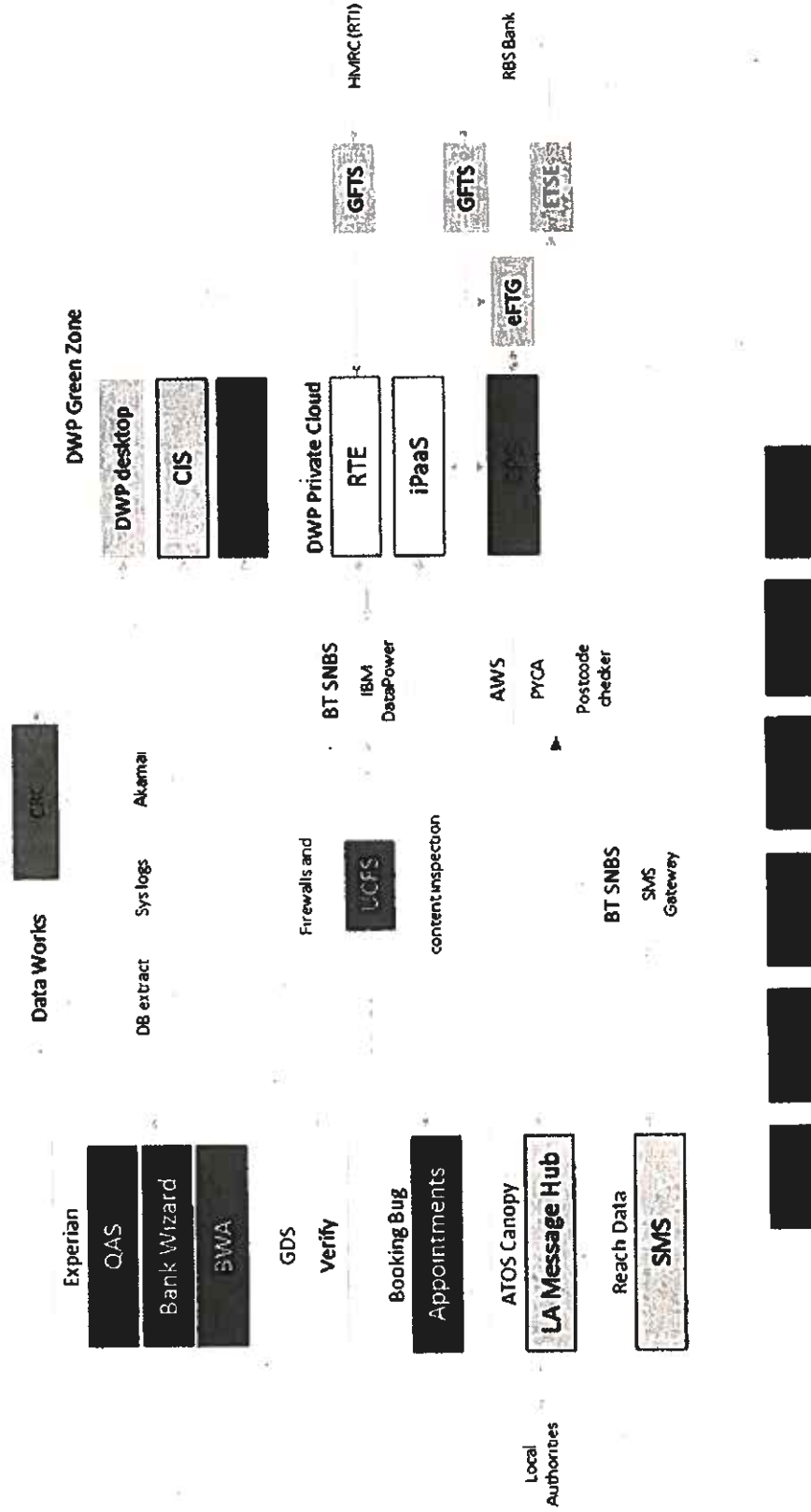
1.1 Types of dependency

During their lifetime, the UC Full Service digital products have grown from standalone to sophisticated scaled-out services operating in the context of wider DWP digital services.

| | |
|---|---|
| <p>Infrastructure, Desktop, Telephony and Contact Centre</p> | <p>Core hybrid hosting, networking and supporting tools, provided by Infrastructure Operations directorate, upon which Digital products run to operate end-to-end. DWP Operations access the UC products, such as desktop computing and office telephony systems, through Digital Workplace products and services provided by the Digital Workplace & Technology Platforms directorate. Next Generation Contact Centre and associated business information used by UC Full Service to interact with customers – provided by a new contact centre platform being rolled out across DWP by the Digital Workplace & Technology Platforms directorate</p> |
| <p>Directly linked digital products</p> | <p>Digital products with which Universal Credit must integrate with to meet user and enterprise needs and operate effectively. Illustrated in section 1.2</p> |
| <p>Production Operations</p> | <p>Production Operations – segregated, named, logged and managed privileged access to secure the interconnected collection of Digital products and services; as well as 24x7 major incident management and recovery across all products and services provided by Infrastructure Operations directorate within Digital Group.</p> |
| <p>Ongoing security</p> | <p>Continuous vulnerability monitoring, baseline vulnerability assessments and threat assessments result in risk categorisation and treatment plans being tracked across interdependent Digital products and services. Security incident management by CRC is a critical dependent capability to detect and resolve incidents.</p> |
| <p>Data & Analytics</p> | <p>Development of a Citizen-Centric Events-Based Data Model to ingest UC, and wider contextual data in order to support UC’s Transaction Risking controls (verification models, Fraud and Error referrals, unreported change nudges) as well as intelligence to support design improvements. Business and Management Information published DWP stats are reliant on</p> |

| | |
|---|---|
| | linking UCFS data with RTI, UC LS, other Departmental and external data. UCFS is dependent on Data and Analytics directorate for much of this and to service OGD data matching/scan services, e.g. NHS prescriptions validation, Fuel Poverty, etc. |
| Support | Multi-channel first line support to resolve most break-fix issues and user requests at first contact with Digital User Support Services. |
| People capability and capacity provision | Digital Group's Functions provide people who come together in multi-disciplinary teams integrating functional capabilities to deliver UC outcomes. As practices mature, they will provide professional depth through which the UC Programme draws team members in sufficient numbers who are held to a professional standard resulting in peer learning and re-use. Shared personal objectives for everyone across Digital Group bring together many products and services in support of UC programme outcomes. The Programme's dependency is therefore on the Practices and Capability building within Digital Group to hire and support its people for personal and professional development. |
| Second Line Assurance | As part of DWP's approach to assurance, UC is dependent on high quality second line assurance (that is, assurance by DWP experts sitting outside the core UC team) in order to ensure both that the service meets its business case objectives, integrates with the broader DWP enterprise, meets appropriate standards, is secure, resilient and performant. Transparent performance management, Digital service assessment, cross-functional oversight and six monthly Digital Design Authority and Planning Forum approvals provide depth of 2 nd line professional design, planning, business and service performance assurance. |

1.2 As an example, this picture represents some of the systematic dependencies and which of the six Digital Group Directors are accountable for each.



2 Dependency management

Dependencies are identified and tracked at different levels within the UC Programme, with escalation of visibility and action as necessary. The mechanisms for actively working through dependencies are described below and depend on the familiar model of management through processes built on top of strong relationships.

2.1 Governance bodies

UC Programme Board is the senior governance body for the UC Programme. The DWP Chief Digital and Information Officer and Director General for Digital Group is a standing member of this board.

Digital Design Authority, convened as part of the Department's governance, provides a formal governance route for business, service, technology, data and security design decisions stretching beyond the insular scope of the UC programme.

Digital Planning Forum, convened as part of the Department's governance, provides a forum in which cross-Digital Group outcomes, design, dependencies and resource are managed across Digital Group.

Enterprise Architects representing the Digital CTO are standing members of the **UC Technical Design Authority**, providing ongoing technical design integration from within the UC Programme

Department Security Oversight Board, convened as part of the Department's governance, provides independent security risk oversight to the satisfaction of DWP CDIO and offers advice to the UC programme, on behalf of DWP Executive Team and Accounting Officer.

2.2 Stakeholder representation

Three Digital Directors have dual accountabilities to both UC Programme and Digital Group. Lara Sampson takes overall responsibility for the definition and quality of the UC products as Product Manager. Anthony Briginshaw and Craig Eblett run Digital product delivery teams and are also responsible for representing the integrated products and services across Digital Group.

2.3 Informal relationships and collaboration

From July 2017, all team members within the UC delivery teams will identify with a Practice within Digital Group. These practices provide an informal, but recognised, mechanism through which practitioners can build professional relationships with the wider Practice community in Digital Group. Note that the Digital Group Practice structure maps to the new Civil Service structure of Digital, Data and Technology Security, Data and Analytics Professions.

3 Dependencies status

Specific dependencies to interlock end-to-end service performance improvements, monitoring and delivery are to be presented shortly to the Digital Planning Forum for agreement and interlock.

Digital Group is fundamentally transforming many aspects of the Department's infrastructure, telephony and UC dependent systems as we leapfrog two decades of underinvestment. Internal capability is growing, resources are being in-sourced from suppliers and we are changing how Digital Group fundamentally operates – including how digital Directors work together to deliver on specific programme outcomes while meeting the needs of the broader enterprise. This balance brings tension which we are working through together.

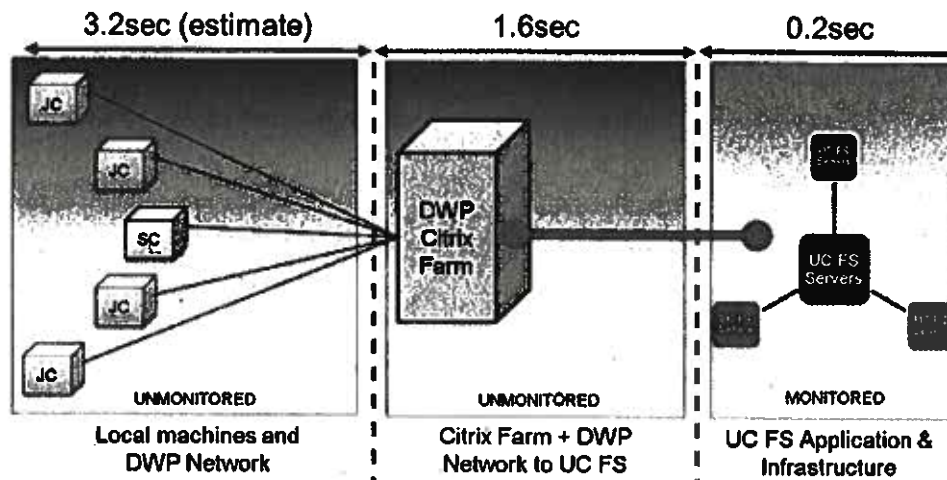
There is clearly a risk to delivering both UC and Digital Group transformations at the same time which is why we need to be proactive and intervene when necessary to ensure all dependencies are managed to ensure successful UC outcomes. Functions within Digital Group are at varying levels of maturity and the Digital Directors engaged directly on UC Programme are working closely with our colleagues to agree how and when to leverage capabilities within wider Digital Group.

3.1 Infrastructure, Desktop, Telephony and Contact Centre

Digital Group has rolled out a new enterprise telephony service and is progressing a comprehensive modernisation of the DWP infrastructure, Contact Centre and Desktop estate, and re-hosting many applications including those which UCFS needs to directly connect with while making the desktop infrastructure and Contact Centre more resilient.

Digital Group is implementing a new contact centre platform for DWP and is making good progress with very limited downtime and problems, especially when considering the size of the change. Our intention is to use this new platform capabilities to route inbound calls directly to agents dealing with a particular case. We will pilot this capability over the summer.

Monitoring and improving the Department's infrastructure and desktop will have a positive impact on agent performance. As an example, please see recent performance metrics:



3.2 Directly Linked Systems

Digital product development teams have established good working patterns and relationships for integrating systems together. This is achieved in part through a dedicated Digital team working in UC programme who work across boundaries to ensure delivery dates and outcomes are met. Constant communication and intervention by the team is required who are responsible for:

- Understanding UCFS product needs, priorities and timescales
- Assisting in overall definition of solutions where needed, exploiting integrated systems functionality to support UCFS
- Feeding through product needs to dependent systems, and tying integration solutions to the UCFS feature backlog
- Costing and commissioning dependent systems work
- Ensuring integration solutions are scalable, re-usable and approved in technical governance where required
- Ensuring continued dependent system scalability in line with UCFS rollout schedule
- Modelling and verifying UCFS operational capacity requirements for dependent systems
- Building on Minimum Viable Products to consider longer term strategic integration solutions (e.g. moving to event based integration)
- Handling performance management of production integrations
- Change management – feeding integration system changes back into UCFS (e.g. in case regression testing is required)
- To provide robust, UCFS driven, continuous integration test solutions to increase UCFS testing scope and manage risk

The Dependent Systems team works and reports in detail – see Annex A for the Dependent Systems Dashboard for w/c 12th June as an example.

As you can see in the dashboard we currently have concerns with regards to Debt Management System scalability which we are picking up with the appropriate Digital team.

The integration focus protects UC Full Service but to effectively interlock dependencies, Digital Group needs to manage the bi-directional impact of product changes and manage the operational services underpinning the collection of products using DWP-wide Digital design, planning, support, service and change management forums.

3.3 Production Operations

Today largely undertaken by Digital Group colleagues operating under Anthony or Craig for UC, in the future, DWP Infrastructure Operations change/release management function will ensure that the production releases meet non-functional requirements, and do not adversely impact other production services. This ensures clear separation of duties between those performing development activities and those managing the production environments and meets the security requirement of managed user with privileged access. Infrastructure Production Operations will provide independent and continuous access by specialist security professionals to all the production logs and other material necessary to support the Cyber Resilience Centre identify, assess and manage security risks. DWP Infrastructure Operations already runs well defined, understood and exercised Department wide major incident recovery, so whatever problem arises, wherever on the estate, an integrated recover effort is organised with appropriate escalations.

The Production Operations function is maturing and transition plans are being considered for the collection of products and services underpinning UCFS.

3.4 Security

DWP Security is establishing an independent vulnerability assessment baseline and overlaying threat intelligence to categorise security risks as well as track treatment plans across interdependent Digital products and services. Security incident management by the Cyber Resilience Centre is being augmented to undertake continuous vulnerability management. Security incident management dry-run is planned ahead of October scaling event.

3.5 Data and Analytics

Data and Analytics feature teams working on enterprise master data model and authoritative customer information including RTI have an on-going critical dependency on UCFS.

3.6 Support

UCFS will become part of integrated 1st line support for all DWP colleagues enabling first contact resolution where possible and seamless escalation to 2nd and 3rd line support. In addition, plans are in place to provide advice for using UCFS product to achieve policy outcomes efficiently.

3.7 People Capability and Capacity Provision

Digital Group is focussed on building people capability and capacity. All recruitment and promotions are now executed through professional and specialist Practices and Heads of Role led by an overarching Capability Board. UC Programme Digital capability will come through this route in future.

3.8 2nd Line Assurance

Digital Service assessment is being planned. Next steps are being progressed to streamline 2nd Line Assurance activities to achieve the necessary independent assessment of Digital aspects in support of achieving UC programme outcomes – especially scaling later this year.

4 Summary

This paper has been brought to this meeting to highlight the extent and status of the Programme's dependencies on Digital Group. While all areas need careful constant ongoing senior attention, all are currently considered manageable by the UC Programme through existing UC/Digital Group control structures through to October 2017.

Digital colleagues embedded in the UC Programme are part of Digital Group and engaged with colleagues as necessary.

More broadly, Digital Group is also on a transformation journey as we cope with two decades of underinvestment and leap frog technologies as well as ways of working across the enterprise. Delivering UC Digital transformation in an interconnected transforming DWP Digital estate at the same time is both challenging and necessary. There are clearly risks to both the UC Programme and the rest of DWP which require constant senior attention and intervention.

UC Programme will be attending the Digital Planning Forum on the 21st June and a verbal update can be provided at the UC Programme Board.

5 Decision / Recommendation

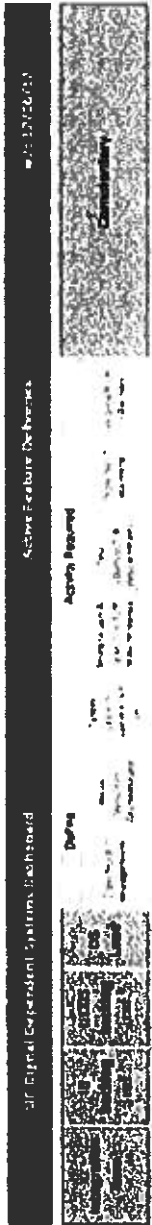
UC Programme will report monthly against each of these dependency areas in the run up to October 2017 scaling, with specific areas of note being explicitly brought to the attention of Board members.



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Annex A – UCFS Dependent Systems Team Weekly Dashboard for w/c 12th June



| System | Requester | Start | End | Phase | Priority | Impact | Dependencies | Notes |
|----------------------------|-----------|----------|----------|-------|----------|--------|--------------|---|
| UCFS-0008 Deployment | GC | 15-03-21 | 16-03-21 | UAT | High | Minor | UCFS-0008 | Deployment completed successfully on 16/03/21. All test cases passed. |
| UCFS-0009 Integration | GC | 15-03-21 | 16-03-21 | UAT | High | Minor | UCFS-0008 | Integration testing completed on 16/03/21. All test cases passed. |
| UCFS-0010 CR Suite | GC | 15-03-21 | 16-03-21 | UAT | High | Minor | UCFS-0008 | CR Suite testing completed on 16/03/21. All test cases passed. |
| UCFS-0011 API Test | GC | 15-03-21 | 16-03-21 | UAT | High | Minor | UCFS-0008 | API Test completed on 16/03/21. All test cases passed. |
| UCFS-0012 Security | GC | 15-03-21 | 16-03-21 | UAT | High | Minor | UCFS-0008 | Security testing completed on 16/03/21. All test cases passed. |
| UCFS-0013 Performance | GC | 15-03-21 | 16-03-21 | UAT | High | Minor | UCFS-0008 | Performance testing completed on 16/03/21. All test cases passed. |
| UCFS-0014 Accessibility | GC | 15-03-21 | 16-03-21 | UAT | High | Minor | UCFS-0008 | Accessibility testing completed on 16/03/21. All test cases passed. |
| UCFS-0015 Compliance | GC | 15-03-21 | 16-03-21 | UAT | High | Minor | UCFS-0008 | Compliance testing completed on 16/03/21. All test cases passed. |

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| UC Digital Dependent Systems Ecosystem | | Active Feature Dashboard | | | W/C 12/06/17 | |
|--|--------------|--------------------------|----------------|-----------------------------------|--------------|------------|
| Management Area | Feature Name | Feature ID | Feature Status | Feature Description | Priority | Category |
| BTS | Registration | 117 | Not Started | UCAT registration for new users | High | Compliance |
| | Termination | 118 | Not Started | UCAT termination for new users | High | |
| Communication | Text | 119 | Not Started | UCAT text messaging for new users | High | Compliance |
| | Smartphone | 120 | Not Started | UCAT smartphone app for new users | High | |
| BTS | Carrier M4 | 121 | Not Started | UCAT carrier M4 for new users | High | Compliance |
| | Carrier M5 | 122 | Not Started | UCAT carrier M5 for new users | High | |
| BTS | Carrier M6 | 123 | Not Started | UCAT carrier M6 for new users | High | Compliance |
| | Carrier M7 | 124 | Not Started | UCAT carrier M7 for new users | High | |
| BTS | Carrier M8 | 125 | Not Started | UCAT carrier M8 for new users | High | Compliance |
| | Carrier M9 | 126 | Not Started | UCAT carrier M9 for new users | High | |
| OS | Carrier M10 | 127 | Not Started | UCAT carrier M10 for new users | High | Compliance |
| | Carrier M11 | 128 | Not Started | UCAT carrier M11 for new users | High | |
| OS | Carrier M12 | 129 | Not Started | UCAT carrier M12 for new users | High | Compliance |
| | Carrier M13 | 130 | Not Started | UCAT carrier M13 for new users | High | |



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| UC Digital Dependent Systems Dashboard | | | | | | | | | |
|--|-----------------|-------------------|---------|-------------|-------|-----|---------|-------------|--|
| Active Feature Enhancements | | | | | | | | | |
| Integration Item | IB Tracking Ref | UCPS Tracking Ref | DS Lead | Phase | Start | End | Current | Next | Comments |
| Deliverin | 79C | 79C | 61 | Not Started | | | | Not Started | <ul style="list-style-type: none"> Review and discuss scope of project Working through dependencies - require job to be UAS RUC build |
| Mobile Fee | 40C | 40C-0007 | 28 | Not Started | | | | Not Started | <ul style="list-style-type: none"> Working to determine UCPS changes Identify required network for mobile & ITC |
| Log Manager | 02C | 79C | 28 | Not Started | | | | Not Started | <ul style="list-style-type: none"> UCPS network and to be installed - investigate requirements |
| ADCC | 129 | 129-172 | 29 | Not Started | | | | Not Started | <ul style="list-style-type: none"> Working on details for UCPS and other Working on details for UCPS and other Working on details for UCPS and other Working on details for UCPS and other |
| CRM | 10K-101 | 79C | 5 | Not Started | | | | Not Started | <ul style="list-style-type: none"> Working on details for UCPS and other Working on details for UCPS and other Working on details for UCPS and other Working on details for UCPS and other |
| Support QAS & BWA | 5A | 5A | 28 | Not Started | | | | Not Started | <ul style="list-style-type: none"> Working on details for UCPS and other Working on details for UCPS and other Working on details for UCPS and other Working on details for UCPS and other |
| Project Data | 5A | 5A | 28 | Not Started | | | | Not Started | <ul style="list-style-type: none"> Working on details for UCPS and other Working on details for UCPS and other Working on details for UCPS and other Working on details for UCPS and other |

| UCPB Reference | UCPB Title | UCPB Description | UCPB Status | UCPB Version | UCPB Effective Date | UCPB Expiry Date | UCPB Author | UCPB Approver | UCPB Reviewer | UCPB Comments |
|----------------|------------|------------------|-------------|--------------|---------------------|------------------|-------------|---------------|---------------|---------------|
| UCPB-001 | UCPB-001 | UCPB-001 | UCPB-001 | UCPB-001 | UCPB-001 | UCPB-001 | UCPB-001 | UCPB-001 | UCPB-001 | UCPB-001 |

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| UC Digital Dependent Systems (Excluded) | | | | Planned Migration | |
|---|----------------|----------------|---------|---|--|
| Integration Item | UC hosting ref | UC hosting ref | DS Lead | Commentary | |
| UCPS | 172 | 75 | UC | • Complete migration to cloud by 31/03/2020 | |
| Message Migration | 115 | 105, 170 | UC | • Complete migration to cloud by 31/03/2020 | |
| OVO | 112 | 2 | UC | • None currently | |
| MTS Threat Intelligence System | 200 | 105, 170 | 1 | • Migration of 01/04/2020 | |