

Parse & Correlate 2024 Consultation

Consultation on proposed changes
to Parse & Correlate software
components and DCC procurement approach

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Table of Contents

- 1. Introduction and Context 3**
 - 1.1. Background 3**
 - 1.2. Purpose of the consultation 3**
- 2. Proposed Technical Changes to P&C..... 5**
 - 2.1. Continuation of Java version 8..... 5**
 - 2.2. Future P&C Service Considerations 5**
 - 2.2.1. Deploying P&C as a container 6
 - 2.2.1. Ongoing support for non-containerised solution 6
 - 2.2.2. Ongoing support for DCC P&C Library 6
 - 2.2.1. User Access to P&C software..... 7
- 3. DCC’s Proposed Procurement Approach..... 8**
 - 3.1. DCC Commercial Considerations..... 8**
- 4. Next Steps..... 9**
- 5. How to Respond 9**
- 6. Attachments 9**

1. Introduction and Context

1. The Data Communications Company (DCC) is Britain's digital energy spine, supporting the transformation of the energy system. DCC is licensed by the Government and regulated by the energy regulator Ofgem to connect smart meters in homes and small businesses across Great Britain to a single secure, digital network. DCC supports the roll-out of second-generation (SMETS2) smart meters, as well as the migration of existing first-generation (SMETS1) meters onto our network.

1.1. Background

2. SEC Section H11 requires the Smart DCC (DCC) to develop, maintain and provide support and assistance to DCC Users for the supply of computer software known as the Parse and Correlate (P&C) software. More information on P&C can be found on the DCC website¹.
3. In accordance with SEC Section H11.6 the DCC is required to consult with Users when proposing to develop any version of the P&C software.
4. DCC previously consulted on updates to P&C software, moving from Oracle Java 7 to Oracle Java 8 in October 2021² and published conclusions to this consultation in December 2021³. An uplift to Oracle Java 8 was implemented through the June 2022 SEC Release.
5. In 2023 Oracle announced changes to its Java licensing model, which impacts the arrangements that DCC has in place today. Therefore, DCC must make appropriate technical changes to ensure that our P&C obligations continue to be met and ask for stakeholder feedback on our recommended approach within Section 2 of this document. Additionally, we ask for views on future P&C service considerations.
6. Further to the technical changes we cover within Section 2, the contract with Critical Software (CSW) for P&C is due to expire in October 2024. This document sets out DCC's recommended commercial approach in Section 3.
7. DCC's next steps are outlined within Section 4 of this document.

1.2. Purpose of the consultation

9. DCC is requesting Users to provide their feedback on both the proposed technical changes and the commercial approach and articulate views on these topics. We invite you to respond to the consultation questions to help DCC understand the impact to customers. Please provide rationale to support your responses.
10. The outcome of this consultation will support direction on the proposed technical changes and inform DCC's route to procurement.
11. There are two main parts to this consultation:
 - a. Proposed technical changes to P&C (Section 2).
 - b. DCC's proposed procurement approach (Section 3).
12. This consultation is expected to impact the following the following Parties:

¹ <https://www.smartdcc.co.uk/our-smart-network/network-products-services/parse-and-correlate/>

² <https://www.smartdcc.co.uk/consultations/parse-and-correlate-consultation/>

³ <https://www.smartdcc.co.uk/consultations/dcc-response-to-the-parse-and-correlate-consultation/>

- Large Suppliers;
 - Small Suppliers;
 - Electricity Network Operators;
 - Gas Network Operators; and
 - Other SEC Parties.
13. Timing for release and costs of the proposed technical changes are unknown but the intention is to raise a Change Request (CR) and Preliminary Impact Assessment (PIA) with CSW and present this information through appropriate SEC Committees, taking into account stakeholder feedback from this consultation.

2. Proposed Technical Changes to P&C

14. DCC and CSW presented the proposed technical changes to Users at the Design Review Forum (DRF) in Q3 of RY2023/24. Customers supported the changes and the issue of a consultation to confirm the technical requirements. The technical changes proposed can be categorised into two distinct areas:

- Continuation of Java version 8.
- Future P&C service considerations.

2.1. Continuation of Java version 8

15. Currently P&C utilises Java version 8, provided and supported by Oracle and is also supported in Red Hat OpenJDK 8.

16. Oracle recently amended its commercial policy requiring enterprise licensing for all future maintained Java Virtual Machine (JVM) releases. This is likely to increase the operational cost of maintaining P&C for DCC Users. Additionally, Java 8 is 'end-of-life' and therefore will incur additional maintenance costs from Oracle.

17. There are two options to maintain the current P&C Java version 8, as follows:

- i. Verify compatibility of P&C with the latest Oracle Java 8 version that is free of enterprise licensing (Java 8 update 201), and utilise this version for P&C.
- ii. Verify compatibility of P&C with the latest Oracle Java 8 patch version, and utilise this patch version for P&C. This Oracle Java 8 version will require Enterprise agreements with the User and Oracle which may have an associated cost to Users.

18. In considering the above options, DCC recommend option (i) as a suitable solution. Our rationale for this is that to move to Oracle Java 8 patch version would require all P&C Users to both obtain suitable Oracle licencing and potentially implement a new Red Hat environment 8.

Q1

Do you agree with DCC's recommended approach of using the latest version of Java 8 rather than the Java 8 patch version? Please provide your rationale if you disagree with the proposal.

2.2. Future P&C Service Considerations

19. P&C Java version 8 must be uplifted before it becomes out of support in September 2026. There are two options to consider:

- Uplift to Java version 17 (end of life in 2026), or
- Uplift to Java version 21.

N.B. All Users will also need to have access to the same version of Java, which may have an associated licencing cost.

20. The recommendation is that Users move to the later version: Java version 21, allowing for a longer period before a subsequent uplift is required.

Q2

Do you agree with the recommendation to uplift P&C to Java version 21? Please could you estimate a suitable timeframe of when you would like this uplift to take place. Please provide your rationale if you disagree with the proposal.

9. In uplifting from Java version 8 to a later version, there are further considerations that DCC is seeking views on from Users of the service, these are:

- Deploying P&C as a container.
- Ongoing support for non-containerised solution.
- Ongoing support for DCC P&C Library.
- User Access to P&C software.

10. We separately ask questions on these considerations below:

2.2.1. Deploying P&C as a container

11. P&C is often used as a library within the User's Systems, but sometimes it is deployed onto User's Application Servers like Jboss/Tomcat/etc. after download from the DCC's website. This causes issues as not all organisations have the same technical configuration and therefore have problems integrating the software to work on their systems.

12. To remove the dependency on User environments DCC propose delivering P&C within a container (Red Hat Enterprise Linux - RHEL) hosted on a more versatile platform, optimised for cloud-native environments (Quarkus).

13. This will ensure that all Users are able to integrate P&C whatever their system configurations, simplifying software deployment (config files, libraries etc. are packaged up within the container), offering greater flexibility and future proofing the service.

Q3

Do you agree with the proposal to implement a containerised P&C solution? Please provide your rationale if you disagree with the proposal.

2.2.1. Ongoing support for non-containerised solution

14. DCC will seek to deploy P&C, as described above, as quickly as possible. Once available to Users, the intention will be to sunset the current P&C application (Java version 8) within an 18 to 24 months period. This will allow suitable time for Users to make the necessary changes.

Q4

Do you agree with shutting down the current P&C solution after the proposed 18-to24-month window? Please provide your rationale if you disagree with the proposal.

2.2.2. Ongoing support for DCC P&C Library

15. DCC also recommends that we continue to support the existing P&C library (non-containerised) as this information may be useful for developers and customers that do not wish to adopt the containerised solution. The cost associated with this continued library support is marginal.

Q5

Do you agree with DCC's proposal to continue supporting the P&C library in addition to the containerised solution, at a marginal cost? Please provide your rationale if you disagree with the proposal.

2.2.1. User Access to P&C software

16. Finally, DCC recommends that the P&C software continues to be made available through the DCC website and no alternative options are offered.

Q6

Do you agree that access to P&C software be made available through the DCC's website and that no alternative is required? Please provide your rationale if you disagree with the proposal.

3. DCC's Proposed Procurement Approach

3.1. DCC Commercial Considerations

29. Currently Parse and Correlate is supported under a DCC contract with Critical Software (CSW), which is due to expire in October 2024.
30. The DCC are proposing running a parallel exercise:
- i. Start negotiations with CSW to carry out the technical upgrades and continue maintenance of the P&C software for no longer than 5 years (aligning to the new DSP contract),
 - ii. Conducting running a Request for Information (RFI) for the provision of a new P&C service provider for the same term.
31. This will allow DCC to test the market and demonstrate whether a direct award to CSW or competitive procurement would deliver best value for money. DCC proposes to conduct these activities in parallel, rather than sequential, due to the current contract expiry date and the time efficiencies that would be achieved if direct award is the agreed way forward.
32. The reprocured service will be based on the existing service requirements and include any agreed technical changes transpiring from this consultation, DCC believe that the procurement approach allows for any changes to progress at industry's behest, ensuring the service remains viable for customers, without compromising attaining best value. Any changes will be agreed via the SEC committees and ultimately SEC Panel, accommodating the consultation output.

Q7

Do you agree with the procurement approach suggested? If No, please provide your rationale and suggested preferred approach.

32. Negotiating with CSW to continue to maintain the P&C software mitigates the risk of any disruption or delay to upgrading the service. DCC would like to understand the impact on Users should a new service provider be awarded the P&C contract. We anticipate a change of service provider could require significant amounts of testing for Users. This requirement for testing will need to be considered alongside the current value attributed to the service to determine the most cost effective and low-risk option for our customers.

Q8

As P&C Users, do you perceive any costs or other impacts to yourselves should a new service provider be awarded the P&C contract? Please could you quantify the potential disruption. This will support any future cost/benefit analysis to inform the DCC's procurement strategy.

4. Next Steps

33. DCC will issue a Change Request to CSW asking for a PIA to be completed and ROM cost options to reflect the technical changes presented in Section 2; and issue an RFI to the market reflecting the commercial proposal as outlined within Section 3.
34. During the consultation period, DCC will further engage with TABASC members to answer any additional questions and provide clarifications where needed. These will be published through the SECAS website.
35. DCC will compile the responses from this Customer consultation, PIA and RFI. The findings will be presented to SEC Sub-Committees during August and September 2024 for review and decision on both proposed technical changes and future commercial arrangements. A final recommendation to issue an RFP or continue with CSW will be presented to SEC Panel for approval (Current planned SEC Panel date for recommendation: 24 September 2024).
36. Should the recommendation from industry be to change supplier and issue an RFP. This will allow DCC to enact termination assistance with CSW in October 2024 to maintain the service, whilst DCC conclude the procurement activity.

5. How to Respond

33. Please provide responses by 5pm on 25 July 2024 to DCC at consultations@smartdcc.co.uk.
34. Consultation responses may be published on our website www.smartdcc.co.uk. Please state clearly in writing whether you want all or any part, of your consultation to be treated as confidential. It would be helpful if you could explain to us why you regard the information you have provided as confidential. Please note that responses in their entirety (including any text marked confidential) may be made available to the Department for Energy Security and Net Zero (The Department) and the Gas and Electricity Markets Authority (the Authority). Information provided to The Department or the Authority, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004). If The Department or the Authority receive a request for disclosure of the information we/they will take full account of your explanation (to the extent provided to them), but we/they cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.
35. If you have any questions about the consultation documents, please contact DCC via consultations@smartdcc.co.uk.

6. Attachments

- Attachment 1: Parse and Correlate Consultation 2024 Response Template v1.