Agilent Allotrope Initiative

Strategic Direction
April 2018

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Software & Informatics Division
Agilent’s Allotrope engagement

2014
Joined Allotrope as Partner Member.

Sept 2015
Agilent R&D started investigation

Phase 0

Phase 1

Nov 2015
1st Agilent Integration project started:
- Prototype development of
  - ChemStation2ADF export
  - ECM ADF Filter
  in pharma company lab

Phase 2

June 2016
Installed prototype of
- CS2ADF Export
- ECM ADF Filter
in pharma company lab

Agilent was the first software vendor providing such prototypes

Offer prototypes as beta to all Allotrope members

Oct 2016 – End 2017
Collaboration with 6 Allotrope members:
Enhanced prototype will support conversion of
- results metadata
- acquisition method parameter of standard LC
- Sequence export
- LC/MS-SQ rawdata
- auxiliary trace rawdata (pump pressure, oven temp, ..)

Phase 3
Commercialization

Since Jan 2018
- Established Allotrope development team
- Developing 1st commercial version of ADFExport for ChemStation
- Further enhancement of ChemStation ADFExport prototype:
  - GC data export
  - Run logbook export
  - ADF audit trail
- Initial prototype for OpenLAB CDS
- Agilent GC experts now contribute to Chromatography working group
- Agilent MS experts proceed contributing to Mass Spec working group
Beta Test Agreement Process

BETA TEST AGREEMENT

Agilent Technologies ("Agilent")

USER

(Business Name) (Company Name)

(Address) (Address)

Date: Date:

By (Authorized Signature)

Printed Name

Title:

Effective Date:

1. Products. Agilent shall provide to the undersigned User, at no charge to User, the following products and related technical information or documentation of Agilent collectively the "Products".

2. Term. User shall be entitled to use the Products for days after delivery of the Products by Agilent to User (the "Term"), unless the Agreement is terminated prior to that time pursuant to section 21 below.

3. Location. Agilent shall at Agilent's expense transport the Products to the following location of User (the "User Location"):

4. Installation. The Products shall be installed at the User Location by User in accordance with the following requirements and instructions:

5. Use. User shall use and maintain the Products during the Term for a minimum of Hours per week.

6. Limitations on Use. Regardless of the User Location, User shall not use the Products in any manner to produce, market, or support its own products. User's right to use the Products is specifically limited to the right to use the Products as described in this Agreement. Further, the Products shall not be moved from the User Location. User may return the Products at any time during the Term upon prior reasonable notice.

7. Technical Support. Agilent shall provide User with the following technical support during the Term:

8. Modifications. Agilent shall respond as soon as practicable to reported problems, but shall have no obligation to respond within a particular time frame. User shall report any Product malfunctions to Agilent in accordance with the following procedures:

9. Title. User retains all right, title and interest in the Products, and shall be responsible for any personal property issues associated with the Products during the Term. User shall clearly identify all Products as the property of Agilent. The Products shall remain personal property and shall not become part of User's estate by inheritance or otherwise. User shall not use, license, sell, or otherwise transfer the Products to any third party.

10. Return of Products. Upon the expiration of the Term or earlier termination of this Agreement, User shall promptly return the Products, and agree to reimburse User for all expenses incurred as a result.

11. Disclaimer of Warranties. User acknowledges that the Products have not been tested for any applications, environment, or general use in the ways intended for the Products. User also acknowledges the risk of damage to its systems, network, equipment, data, and software.

12. Future Availability. While Agilent intends to make the Products available as soon as possible, User acknowledges that there may be delays in delivery, testing, or other circumstances that may delay or prevent delivery of the Products.

13. Liability Limitations. Agilent shall not be liable to User for any loss or damage to User or its customers, or any other third parties caused by the Products or by Agilent's performance of this Agreement. Agilent shall not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory, arising out of any use of the Products or any performance of this Agreement.

14. Risk of Loss. User shall be liable for all loss or damage to the Products while the Products are in the possession of User.

15. License. User shall defend, indemnify, and hold harmless Agilent from all claims, losses, costs, damages, expenses (including attorney's fees), and other liabilities arising out of User's use, operation, or possession of the Products.

16. Intellectual Property Rights. All right, title, and interest in intellectual property rights to the Products, including that which may be or become protectable by patent, copyright, trademark, trade secret, or other similar laws, shall remain exclusively with Agilent. Any license granted to User is for User's use, except for the limited rights to use and test the Products as expressly provided in this Agreement. User shall not use Agilent's copyrights, trademarks, trade names, or proprietary information in any way.

17. Confidentiality of Information. User shall protect all information pertaining to the Products to be of a proprietary and confidential nature. User shall prevent the confidentiality of such information until such information becomes public by using the same degree of care, but not less than a reasonable degree of care, to prevent the unauthorized use, disclosure, or publication of such information as User uses to protect its own confidential information of a like nature. User shall not allow in any manner the Agreement or any records or test results obtained pursuant to this Agreement.

18. Alterations by User. User shall not alter or modify the Products in any manner. User shall not transfer any of the Products to any third party.

19. Assignment. This Agreement is personal to User. User shall not assign or otherwise transfer any rights or obligations under this Agreement.

20. Termination. In the event that User fails at any time to comply with this Agreement, Agilent may terminate this Agreement immediately upon written notice to User. Further, either party may terminate this Agreement without cause on fifteen days prior written notice. The rights and responsibilities of the parties pursuant to sections 9, 10, 11, 12, 13, 14, 15, 16, 17, and 18 of this Agreement shall survive the expiration or earlier termination of this Agreement.

21. Entire Agreement. This Agreement supersedes the entire understanding and agreement of the parties relating to the subject matter hereof. No representation, promise, or condition not contained in this Agreement shall be binding on either party. Any modification to this Agreement shall be in writing and signed by the authorized representatives of both parties.
Agilent ADF Products - SID Roadmap for Allotrope

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- **Agreed / In Development**: OpenLAB ChemStation C.01.09
- **No final agreement / in planning depending on Allotrope Member inputs or needs**: Prototype OpenLAB CDS 2.3, Prototype ECM Filter

**Allotrope integration projects with selected Allotrope Partners**

Depending on Adoption and the Allotrope Member Needs

- Further Allotrope Product Releases
- Further Allotrope Product Releases
- Further Allotrope Product Releases
ChemStation Allotrope Export

Allotrope Data Format (ADF)

- LC-UV rawdata and ChemStation files only. No LC-UV metadata due to delayed data model.
- Single Runs
- Automated post-run export
- Uploading to ECM by ECM Scheduler
  First release is “Research Use Only”
- Future development
  - Sequences
  - Localization
  - Long-term archiving of calibrated results, no sample audit trail etc.
  - Manual export

Allotrope Mission

…development of a comprehensive and innovative Framework… …for managing analytical data throughout its lifecycle.

Remark: ADF viewer (ADFExplorer) provided by Allotrope Foundation
Recent progress

- Established Allotrope development team in Waldbronn
- Developing 1st commercial version of ADFExport for ChemStation
- Further enhancement of ChemStation ADFExport prototype:
  - GC data export
  - Run logbook export
  - ADF audit trail
- Initial prototype for OpenLAB CDS
- Agilent GC SME (George Reiner) now contributes to Chromatography working group
- Agilent MS SME (Dave Peterson) proceed contributing to Mass Spec working group. Worked w/ Genentech on a prototype script to schedule their “ADF” archival system for LC-QTOF data.
Refresher: Phase 1 & 2

see poster

OpenLab ChemStation prototype can write today ....
A demo tells more than thousand slides …

- ADF Export ChemStation export for LC data
  - Run Logbook
  - ADF Audit Trail
- ADF Export ChemStation export for GC data
- ADFExport for OpenLAB CDS
- Search ADF data and launch ADF Explorer from within OpenLAB ECM
- Prototype: OpenLAB ECM server-side conversion of ChemStation data
Demos…
Thank you!