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Documentation
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Welcome

Introduction
The Release Notes provide an overview of the new features and changes included in this release of Harmony Suite 2.10.
New features in this Release 2.10

1. Introduction of GNAF Plus in Harmony Suite
GNAF Plus is an enriched version of PSMA’s GNAF dataset. In addition to the existing GNAF attributes appended to an address GNAF Plus provides attributes associated with the address based on the 2016 Census Data SEIFA (Socio-Economic indexes for the Areas) from the Australian Bureau of Statistics (ABS). For further information regarding the ABS data please go to [http://abs.gov.au/websitebs/censushome.nsf/home/seifa](http://abs.gov.au/websitebs/censushome.nsf/home/seifa).

2. Country name allocation during parsing
A new PDP (Pluggable Data Processing) module incorporating country name allocation is introduced into this version. This is specifically relevant when processing both Australia and New Zealand addresses in a single instance. The PDP will automatically allocate country name if it is not provided as part of the input.

3. Multiple address lines now available within the cleanse API
In this latest version, users now have the option to expose multiple address lines within the cleanse API response (e.g. address line 1 contains street information, address line 2 contains locality information and so on). This automatically assembles multiple address lines in the response.

4. Harmony Suite licensing update via Console
The Harmony Suite Administration Console has been updated to support software license updates. This provides Harmony admin users with the ability to update the license by just clicking a button.

5. Improved handling of terms in brackets in the input
A new pre-processor has been added to handle terms in brackets and to segregate the terms in another field. Pre-processors are modules built to support the parsing capability.

6. Introduction of local Harmony Suite Rapid Address demo
A stand-alone Harmony Suite Rapid Address demonstration is available within this release. The Rapid Address service is available for organisations that want a ready-made browser-based Rapid Address look-up using their existing Harmony Suite installations.
Enhancements

1. New configuration option has been introduced to match full address line with individual address components
2. ‘TRUSTEES OF THE GORDON L HOOK TRUST’ can now be parsed as a company
3. Additional terms have been added under Harmony Address Standardization (e.g. Block number type, Extra number type, Place major/minor type)
4. Add ‘PASSAGE’ in all related Standardisation Dictionaries
5. Decommissioning of DBMigrate and Seamless Upgrade scripts
6. Improved handling of the length of Postal number prefix and suffix - up to 3 chars
7. Includes 'TITLE and SUFFIX’ as part of componentized input fields
8. Includes GNAF Reliability field for some Rapid Address results
9. Improvements in CNAR (Critchlow National Address Register) geocoding rate. CNAR is provided by Critchlow Ltd a Mastersoft data partner
10. Various data improvements to CNAR feed
11. Suburb now shown as all upper case when using CNAR Rapid Address
12. Radius now configurable for CNAR Reverse Geocoder
13. Enhancement of PAF (Post Address File) / GNAF Look-up (i.e. using Linktable)
14. When missing, zeroes are appended after the decimal for each latitude/longitude values in GNAF
15. Documentation for all new modifications introduced in this version
16. Exposure of verbose logging of GNAF Validation PDP similar to existing have.log
17. Floor type and floor level values have been populated in separate fields
18. When deploying Harmony_admin.war, cache clearing is now forced
19. Various enhancements in GNAF Validation PDP rules
20. In HRAWeb, when the source of truth is AUSOTS, it is now possible to expose all the attributes from GNAF and PAF
21. Enhanced importing and exporting of job definitions in Harmony Batch System
22. Improvement in the license expiry message for CNAR
23. Improved streamlined Harmony installation process on Unix and Windows systems
24. Pop-up message displayed once only when handling custom KB
25. Inclusion of Case option in Harmony Suite Rapid Address
26. Inclusion of respective swagger URLs in Harmony Web Services PDF Guide documentation
27. Shortcut has been created when Tomcat is picked as default application server
28. New phone parser now has backward compatibility with old parser
29. Streamlined folder structure of Harmony Suite installation
30. Enhanced full address line field presentation for NZ when address validation is performed
31. Introduction of an inline option to allow overriding of pre-processors
32. Enhanced order of the job templates in Harmony Batch via Admin Console
33. Introduction of auto-log out when there is no activity in Harmony Batch via Admin Console
34. During a batch review, auto-pop in introduced so that when the user selects "Accept" or "Reject", the next address for review automatically pops into the lookup dialogue
35. During batch review, "output" and the "manually reviewed files are now automatically combined for easier reference
36. Enhancements in Harmony Batch via Admin Console ensure consistency of field naming
37. Introduction of a configurable number of hits for candidate address. This limits the number of addresses returned during the review
38. To ensure awareness of the status of status batch processing via the console, auto-refresh of the page has been introduced
39. Default file type selection has been changed to all file types when uploading the file for batch runs via the console
40. Enabling string functions on handling output format of Harmony Batch via Admin Console
41. Users now have the option to output in both pipe and comma delimited formats when reviewing batch runs via console
42. New field has been included in GNAF rapid address locality API response to distinguish the duplicate locality names
43. Handling of some sub dwelling type presentations has been improved
44. Various improvements in NZ address parsing
45. Linktable index now contains data in upper case to ensure consistency when presented in Harmony output
Bug fixes

1. "3 TIMBARA CLUSTER, FAIRHAVEN VIC 3231" is now validated against PAF
2. "342 MAIN ROAD 21 RD, CAREW SA 5270" is now validated against PAF
3. Resolution for the exception thrown when adding or disabling a lexical in the knowledgebase
4. “9 LATITUDE NORTH, KEWARRA BEACH QLD 4879” now parses
5. Address unknown value now visible in SOAP web service
6. Resolution of the download button in batch review interface
7. Building name parsed as sub locality now resolved and parses as building name
8. Exception of Harmony web services health checker when pointing to localhost has now been resolved
9. Differences between REST and SOAP for getSimilarLocalities method now rectified
10. Corner streets now parsed into two streets accordingly
11. “F1/495 MAIN STREET Palmerston North PALMERSTON NORTH 4410” gets validated against CNAR
12. Inputs with State Highway abbreviations now gets validated against CNAR
13. When using CNAR some inputs are getting matched to the most relevant postcode
14. Documentation adjustments have been made for AuPostmaster functionality
15. Documentation fix for Source of Truth (SoT) Installation Reference Guide
17. PDP Changed Item now records when using DuplicatedSubdwellingProcessor
18. Filter now correctly created in AlternateTownAddressLookup
19. Differences in results for some methods between NZPAF2 and HELLO_NZPAF are now rectified
20. Documentation updated in relation to the new Installation process
21. New Harmony installer now creates windows shortcut for Tomcat
22. Issue with presence of street suffix in the input has been rectified
23. HELLO_CNAR and HELLO_NZAD now show in the health checker
24. HRA NZ SOAP calls now work when using HELLO_NZPAF
25. Misspelling in installer interface has been fixed
27. Misspelling of merged output file name in batch review has been rectified
29. Missing APIs in Harmony Rapid Address NZ RESTful Demo page now included
30. Missing floor number now fixed in NZ HRA RESTful single liner response
31. Relevant user ID now shows up under batch review history
32. Abnormal termination of CNAR reverse geocoder now fixed
33. “DEAN” as middle name now gets parsed successfully
34. New country allocation PDP now shows as part of enabled features
35. Exception in Web Service health checker now rectified
36. Harmony Rapid Address CNAR lookup issue when floor level is in the input has been resolved
37. NZAD version in RESTful demo now shows the correct name
38. Placemajor Typ duplication for one address when using CNAR Geocode PDP has been rectified
39. Sanity check section has been removed from related documentation
40. Parsing issue with building names after sub dwelling has now been resolved
41. Town/City alias issue is fixed and behaves as expected during validation
42. Street names with directions East and West now handle correctly
43. HarmonyServiceConfig check has been removed to prevent exceptions
44. Synonym locality “Rosebud West” now works as expected
Appendix A - Supported platforms

Harmony Suite Release 2.10 was tested and certified for the following platforms.

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Microsoft Windows</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64-bit Windows Server 2012 R2</td>
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<tr>
<td></td>
<td>64-bit Windows 2008 Server</td>
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<tr>
<td></td>
<td>64-bit Windows 2016 Server</td>
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<tr>
<td></td>
<td>64-bit Windows 7</td>
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<tr>
<td></td>
<td>64-bit Windows 10</td>
</tr>
<tr>
<td>Oracle Solaris</td>
<td>Sun Solaris 10 11/06 s10s_u3wos_10 SPARC</td>
</tr>
<tr>
<td>IBM</td>
<td>IBM AIX 5.3</td>
</tr>
<tr>
<td></td>
<td>IBM AIX 6.1</td>
</tr>
<tr>
<td></td>
<td>IBM AIX 7.1</td>
</tr>
<tr>
<td></td>
<td>z/OS V1R8.0</td>
</tr>
<tr>
<td>Enterprise Linux</td>
<td>Red Hat Enterprise Linux Server Release 5,6,7</td>
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<tr>
<td></td>
<td>SuSE Enterprise Linux 11 SP1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Application Server</th>
<th>Apache</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Apache Tomcat 6.0</td>
</tr>
<tr>
<td></td>
<td>Apache Tomcat 7.0</td>
</tr>
<tr>
<td></td>
<td>Apache Tomcat 8.0</td>
</tr>
<tr>
<td>IBM WebSphere</td>
<td>IBM WebSphere 6.1 (with Fixpack 19 or above)</td>
</tr>
<tr>
<td></td>
<td>IBM WebSphere 7.0 (with PK83371)</td>
</tr>
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<td></td>
<td>IBM WebSphere 7.0.29</td>
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<td></td>
<td>IBM WebSphere 8.0</td>
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<tr>
<td></td>
<td>IBM WebSphere 8.5.5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Java Virtual Machine</th>
<th>64-bit JVM 1.7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64-bit JVM 1.8</td>
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</tbody>
</table>
## References and support

### Harmony Suite Reference Guides

The complete list of current Harmony Suite Reference Guides is listed below; under the product component for ease of reference.

<table>
<thead>
<tr>
<th>Product Component</th>
<th>Reference Guides</th>
</tr>
</thead>
</table>
| Information Integrity Engine | • Installation and Upgrade for Unix  
|                             | • Installation and Upgrade for Windows  
|                             | • Harmony Management Console  
|                             | • Harmony Knowledgebase Configuration  
|                             | • Harmony Web Services |
| Harmony Batch System        | • Harmony Batch System Cleanse  
|                             | • Harmony Management Console  
|                             | • Harmony Knowledgebase Configuration  
|                             | • Harmony Batch System in z/OS |
| Harmony Match               | • Harmony Batch System Match  
|                             | • Harmony Management Console  
|                             | • Harmony Knowledgebase Configuration  
|                             | • Harmony Web Services |
| Harmony Rapid Address       | • Harmony Rapid Address Australia  
| – Australia                 | • ROAD Source of Truth Installation |
| Harmony Rapid Address       | • Harmony Rapid Address New Zealand  
| – New Zealand               | • ROAD Source of Truth Installation |
| Harmony Post                | • Harmony Post Australia  
| – Australia                 | • ROAD Source of Truth Installation |
| Harmony Post                | • Harmony Post New Zealand  
| – New Zealand               | • ROAD Source of Truth Installation |
| Harmony Postmaster          | • Harmony Postmaster |
| Harmony Locate              | • Harmony Locate  
|                             | • ROAD Source of Truth Installation |
| Harmony RealTime            | • Harmony RealTime |
| Harmony Extensions          | • Harmony Extensions |
Help and Support

For help and support, contact Mastersoft through the following channels.

Australia
Phone 1800 236 096

New Zealand
Phone 0800 367 674

Email for Australia and New Zealand
support@mastersoftgroup.com

Please ensure you provide us with the following information to enable us to assist you with your query.

- Your name
- Your company name
- Your phone number and email address
- Product name and version (e.g. Harmony 2.10)
- Any relevant Source of Truth (SOT) names and versions (e.g. AMAS SOT)
- Details of any third party software and other environmental information necessary to understand the problem
- A brief description of the problem and steps necessary to recreate, and include:
  - The error number and message
  - The input record that caused the problem
  - The input string that was passed (if Harmony was called from an API)
  - Screen shots where applicable