|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | Description/Source/Examples | | Tools | Notes |
| Relational Database | MySQL, MS Access, Oracle, SQL Server, DB2 | | loaddata – LoadSQL/SaveSQL  SQAPL  .NET | Stand-alone versions – MS Access, MySQL, SQL Server Express |
| NoSQL Database | Document stores  Object databases  Key-Value stores | | none yet | specific APIs are available that may be callable from Dyalog |
| Excel | Spreadsheet | | loaddata – LoadXL/SaveXL  .NET | See also:  past Dyalog User Meetings  Vector articles |
| Text/CSV, Text/Delimited | Comma or tab delimited flat file | | loaddata – LoadTEXT/SaveTEXT  Native file (⎕N) functions |  |
| Text /XML | Extended Markup Language  file  web service | | loaddata –LoadXML/SaveXML XML namespace  ⎕XML | Useful for configuration files  Data exchange/Serialization |
| JSON | JavaScript Object Notation  web service  Java | | JSON namespace | More compact than XML  Good for serialization |
| MS Office | Word  PowerPoint  OneNote | Outlook  Access  Publisher | .NET | See also:  Vector articles |
| Google Applications | Google currently has 87 APIs for its various services, most with free courtesy limits | | conga – samples.HTTP--- for APIs that provide REST interface  .NET |  |
| Web Services/REST | Uses standard HTTP commands. Data is generally returned as JSON or XML | | Consumer:   conga – samples.HTTP---  Provider:  MiServer | REST web services are becoming increasingly popular. Google, MS Office 365, Twitter, many government services have REST APIs |
| Web Services/SOAP | Uses SOAP protocol over HTTP. Data is returned as XML. | | Consumer:  SAWS.Call  Provider:  SAWS.Run |  |
| Data Visualization |  | | Built-in Dyalog GUI Chart Wizard SharpPlot Syncfusion (WPF and Javascript) |  |

|  |  |
| --- | --- |
| URL | Description |
| <http://www.w3schools.com/> | Tutorials and references for XML, HTML, JSON, SQL, among others |
| <https://developers.google.com/apis-explorer/#p/> | Google APIs Explorer |
| <http://msdn.microsoft.com/>  <http://msdn.microsoft.com/library/office/bb726434(v=office.12).aspx> | Microsoft Developer Network Office client development |
| <http://json.org/> | JSON description |
| <http://jsonlint.com/> | JSON validator |
| <http://www.w3schools.com/xml/xml_validator.asp> | XML validator |
| <http://www.connectionstrings.com/> | Connection Strings Reference |