# Estimate Database Size For 1 year

## Sql Server 2008 Data Types

|  |  |
| --- | --- |
| **Type Name** | **Size (bytes)** |
| int | 4 |
| nvarchar(x) | 2x + 2 |
| bit | 1 |
| datetime | 8 |
| varchar(x) | x + 2 |
| float | 8 |

## Database Size

* For 1 record:

|  |  |
| --- | --- |
| **Table name** | **Size (bytes)** |
| Market | 353 |
| Parse Info | 1217 |
| Product | 207 |
| Product Attribute | 24 |
| Log File | 115 |
| User | 79 |
| Role | 106 |
| Profile | 3994 |
| Market Distance | 16 |
| History | 64 |
| History Detail | 20 |
| Dictionary | 210 |
| Sell Product | 24 |
| User Price | 76 |

* Estimated size in 1 year:

|  |  |  |
| --- | --- | --- |
| **Table name** | **Estimated total records** | **Estimated Size (bytes)** |
| Market | 100 | 35,300 |
| Parse Info | 10 | 12,170 |
| Product | 1000 | 207,000 |
| Product Attribute | 365,000 | 8,760,000 |
| Log File | 370 | 42,550 |
| User | 500 | 39,500 |
| Role | 3 | 318 |
| Profile | 500 | 1,997,000 |
| Market Distance | 4950 | 79,200 |
| History | 365 | 23,360 |
| History Detail | 912,500 | 18,250,000 |
| Dictionary | 4000 | 840,000 |
| Sell Product | 10,000 | 240,000 |
| User Price | 1000 | 76,000 |
| Total | | 30,602,398 |

## Final Result

* At least: 29885 MB 30GB

# Estimate Needed RAM

* Function: ask for system suggestion.
* 1 user, 10 markets, 10 products, all products can be bought.
* Size = 1414 + 10\*353 + 10\*(207+24)\*2 + 160 + 400 + 2800 = 12,924 (bytes)
* 100 users: 1,292,400 bytes.

# Cost Estimation

## Fix Data

|  |  |
| --- | --- |
| **Name** | **Price (USD)** |
| Visual Studio Ultimate 2012 with MSDN | 13,272 |
| Microsoft SQL Server 2008 R2 | 7,525 |
| Windows 7 Ultimate | 118 |
| Salary | 3,000 |
| **Total** | 23,915 |

## Other Data

|  |  |
| --- | --- |
| **Name** | **Value** |
| Google Map API | $8,000/year |
| Number of user | 1,000 |

### Sell Price

* Sell at $2/month for each user.
* We collect $2,000/month
* Pay $666/month for Google Map.
* We have $1,334 left.
* Payback in 18 months.