

Reports in ServiceDesk

A Brief Explanation of Underlying Methodology and Uses

ServiceDesk produces a plethora of reports. In early 2010 we realized there was a need to comprehensively catalog and describe each of these in a single document. This is our current state of resulting work. At present (and though it's the vision for it to be so), this document is not yet comprehensive. In other words, it's a work-in-progress, and significant further work is needed before it can claim the distinction of being a one-place catalog/description of all ServiceDesk reports.

In the meantime, we can at minimum claim this document describes several of the major reports. In particular, it describes (likely) *most* of the reports that involve analytics.

For context, many of ServiceDesk's reports are scattered within several, contextually relevant operational venues. None of those such scattered reports have yet had descriptions added to this document (it's still a future project).

By contrast, there is a significant collection of reports accessed via a particular form that has no other purpose — except to be a locale from which to access that collection. It's called (and without any intended irony) the *Reports* form (accessed via shortcut **F11**).

A general note about reports in the Reports form is that, for virtually each, there is opportunity to export the raw, record-by-record data details on which the analytical summary figures are based. These exports can be helpful if you wish to perform your own extended analysis or reporting, or perhaps wish solely to check the integrity of the analytical results as otherwise presented to you. To produce those exports, after a report displays, look for an Export button in the Reports form's bottom-right corner.

Please bear in mind there is a counterpart to this document whose design is to be a review/description of all the *exports* in ServiceDesk. It may be found via a dedicated button in ServiceDesk's *Export Miscellaneous Data* form (Shift-F3), or via this link:

<http://rossware.net/MiniManuals/Reports in ServiceDesk.pdf>

Exports are distinguished from exports in that they simply output selected elements of data for you (typically via Excel file or similar). By contrast, reports are designed to *analyze* data, compiling sums, ratios, making comparisons, and so on — to give you digested analytics.

Chapter 1

The SalesSummary Report

Aside from a few of its supplementary figures, all data in this report comes directly from the SalesJournal (accessible in terms of its raw entries via the *SalesRead* form, quickkey shortcut is **F4**). In other words, to produce this report, ServiceDesk reads directly from applicable records within that file/journal, tabulates the results, and displays them to you.

	Total of jobs completed in period	Total of jobs paid for in period	Total of jobs completed but billed	Total jobs done and now paid
Merchandise Sold	0.00	0.00	0.00	0.00
Parts Sold	9,694.33	12,707.53	4,508.40	7,521.60
Total of goods sold	9,694.33	12,707.53	4,508.40	7,521.60
Service Calls Sold	13,346.00	15,560.00	3,786.00	6,000.00
Additional Labor Sold	8,792.75	10,997.50	3,987.75	8,592.50
Total of labor sold	22,138.75	26,557.50	7,173.75	11,692.50
Total Sales	31,833.08	39,265.03	11,682.15	19,114.10
Tax on sales	732.02	972.70	342.22	582.90
Gross Invoice Totals	32,565.10	40,237.73	12,024.37	19,697.00
Quantity of S. Calls:	307	357	89	183
Quantity of Invoices:	331	353	92	144
Qty. of zero-sale tickets:	64			
Average charges per S. Call:	103.62	102.52	131.56	137.51
Average charges per Invoice:	96.17	102.52	120.98	132.76
Ratio of total Labor to Sales:	69.5	67.6	61.4	60.4
Work-Out to determine True Change in Total Dollars tied up in Outstanding ARs:				
Begin with SalesJournal-based figure (total of Paycode 2s minus 3s, as per above):				(\$7,672.53)
Subtract for change in balance of A/R (paid-for dates):				\$6,885.49
Subtract for A/R Bad Debt Writeoff:				
True, Net Change in Balance of Outstanding ARs:				(\$14,558.12)
Work-Out to determine True Net-of-Money-Received:				
Begin with SalesJournal-based figure (total of Paycode 2s minus 3s, as per above):				\$40,237.73
Add for Changes in Pre-Pays (i.e., Pre-Paid Invoices):				\$0.00
Add for Changes in balance of A/R (i.e., Pre-Paid Invoices):				\$0.00
Add for EOM Payments (i.e., funds received for work done but not billed):				\$0.00
Subtract for Funds Lost, Stolen, or Otherwise Unrecoverable (i.e., Paycode 6s):				\$0.00
Subtract for Discounts Granted (i.e., For accelerated payments):				\$0.00
Subtract for Parts Credits (since they don't actually represent money rec'd):				\$0.00
True, Net-of-Money-Received:				\$40,237.73

Based on tax rates as now specified, exempt materials totaled \$9,694.33, exempt labor \$7,498.35 (blue indicates the value is needed by your system or external accounting)

The main body of the report is divided into four columns. The first column tabulates the total of Paycode 1 and Paycode 2 SalesEntries, and is intended to display totals for work actually *completed* during the period (regardless of whether paid or not). The second column tabulates the Paycode 1 and Paycode 3 SalesEntries, and is intended to show the total of work *paid for* in the period (regardless of when actually completed). The third column is, simply, the total of Paycode 2s, and fourth of Paycode 3s (these columns are there for review if wanted, but it's typically the first or second that you'll pay most attention to).

Business Reports

TABULATION OF SALES TOTALS

	Total of Jobs completed in period	Total of Jobs paid for in period	Total of Jobs completed but billed	Total previously done and now paid
Merchandise Sold	0.00	0.00	0.00	0.00
Parts Sold	9,694.33	12,707.53	4,508.40	7,521.60
Total of goods sold	9,694.33	12,707.53	4,508.40	7,521.60
ServiceCalls Sold	13,346.00	15,560.00	3,706.00	6,000.00
Additional Labor Sold	8,732.75	10,997.50	3,387.75	8,592.50
Total of labor sold	22,138.75	26,557.50	7,173.75	11,592.50
Total Sales	31,833.08	39,265.03	11,682.15	19,114.10
Tax on sales	73.50	342.22	132.22	582.90
Gross Invoice Totals	32,558.58	39,607.25	11,814.37	19,697.00
Quantity of S. Calls:	73	90	30	153
Quantity of Invoices:	92	92	92	154
Qty of zero-sale tickets:				
Average charges per S. Call:	182.17	171.82	121.26	137.51
Average charges per Invoice:	353.83	430.51	126.98	132.78
Ratio of total Labor to Sales:	69.5	67.6	61.4	60.6

Adjustments

Work-Out to determine True Change in Total Dollars tied up in Outstanding A/Rs:

Begin with SalesJournal-based figure (total of PayCode 2s minus 3s, as per above):	(\$7,672.63)
Subtract for change in balance of A/R Partial Payments (i.e., Paid-To-Dates):	\$0.00
Subtract for A/R Bad Debt Writeoffs:	\$6,335.43
True, Net Change in Balance of Outstanding A/Rs:	(\$14,508.12)

Work-Out to determine True Net-of-Money-Received:

Begin with SalesJournal-based figure (total of PayCode 1s plus 3s, as per above):	\$40,237.73
Add for Changes in Pre-Pays (i.e., any amount rec'd prior to SJ entry):	\$0.00
Add for Changes in balance of A/R Partial Payments:	\$0.00
Add for EOB Payments (i.e., judge amounts as used to match payments to A/Rs):	\$0.00
Subtract for Funds Lost, Stolen, or Otherwise Unrecoverable (i.e., PayCode 6s):	\$0.00
Subtract for Discounts Granted (i.e., for accelerated payments):	\$0.00
Subtract for Parts Credits (since they don't actually represent money rec'd):	\$0.00
True, Net-of-Money-Received:	\$40,237.73

Based on tax rates as now specified, exempt materials totaled \$9,694.33, exempt labor \$7,498.35 (Blue indicates the value is needed by your system of external accounting)

Type of Report

- Sales Summary
- Commissions Earned
- Employee Wages
- Accounts Receivable
- Performance - Clients
- Performance - Techs

To be printed on

- Monitor
- Printer

1/1/01 to 1/31/01

Export to QuickBooks

Export with Extended Data

Produce Report

Exit

The second section applies a series of adjustments to work out such matters as true total of money received, changes in A/Rs, and so on. This adjustment process is needed because the SalesJournal, in and of itself, only reflects money received when the entirety of a sale is paid. A/Rs, in turn, may be partially paid, but that fact does not show in the face of any SalesJournal entry. To make the adjustments as applicable in this section (and arrive at the figures provided), ServiceDesk augments it's reading of entries in the SalesJournal with reading of entries in the *Applications* Journal (quickkey shortcut is **Alt-F9**).

You'll note there is an option to either display on-screen or print this report. If you take the option to print, you'll have a further option to include line-by-line entries, concerning each sale that went into the report. That option simply is not present if electing to display on-screen.

There are also several Export options associated with this report—accessible via buttons that appear when the report is displayed.

One matter of occasional confusion concerns the section in the report where there is a distinction between "ServiceCalls" and "Tickets." Basically, each entry in SalesJournal represents a "ticket," so far as any applicable column of display is concerned. The intent is to classify the entry also as a "service call" if it is an entry reflecting in-field service (as opposed to POS activity), and if it's the first (typically only) such entry as applicable on a given job. In other words, we want to exclude (as defined "service calls") entries if they involve going back (for recall or continuation work) after the initial work was supposedly completed.

The actual method that's used in effort to achieve the above outcome is as follows:

1. If the S.Call amount column in the SalesEntry is unequal to zero, the entry is tallied as a ServiceCall.
2. If the Name column is in the form XX-Xxxxx (as in, say, WP-Smith), and if the Labor amount is at least \$60, the system tallies the entry as a ServiceCall. The logic here is that for warranty work it's common to leave the S.Call field blank, and to put all labor in the Labor field. Thus, if from the Name field it appears to be a likely warranty client, and from the amount in the Labor field it appears it was likely the entry on a job that reflected charging for the totality of the repair, the entry is tallied as an S.Call.

Chapter 2

The *CommissionsEarned* Report

This report is provided for those who pay their technicians on a commission basis. Like the SalesSummary, it reads (finds its data) directly in your SalesJournal. It will apply whatever commission basis you have established in the *EarningsRates* form (quickkey is **Alt-F2**), as applicable to the tech on whom you are creating a report.

The screen-displayed version of this report contains summary data only, an in two columns.

	Totals (in work completed)	Totals (in work paid for)
Merchandise Sold	0.00	0.00
Parts Sold	2,297.52	3,632.55
Service Calls Sold	3,401.00	4,981.00
Additional Labor Sold	2,155.00	3,245.25
Total Sales	7,853.52	11,858.80
	Effectively Earned	As Currently Paid
Total Commissions:	2,543.35	3,818.88

Like the first two columns in the SalesSummary, these reflect: first, figures pertaining to work *actually performed* during the period (i.e., the total of applicable Paycode 1 and 2 entries); and second, of jobs *paid for* during the period (the total Paycode 1 and 3 entries). You'll want to pay the tech on whichever column reflects your payment policy.

Also (and still much like the SalesSummary), if you elect to print the report, you'll have the option to include the line-by-line entries that went into producing the summary figures. Usually, this is useful for allowing techs to verify they are indeed being paid on each of their jobs.

Chapter 3

The *WagesEarned* Report

This report reads its data, simply, from the *TimeLog.XX* file, as applicable to the employee on whom the report is being created (such files are created for any employee when such employee uses the ServiceDesk ClockIn and ClockOut functions (with the "XX" extension, on the filename, being the two-letter abbreviation as applicable to the employee in question).

Date	Time Range	Hours	Notes
01/03/00	07:00 to 15:19	8.32 hours	8.32 hours for the day
01/04/00	07:07 to 15:07	8.00 hours	8.00 hours for the day
01/05/00	07:06 to 15:06	8.00 hours	8.00 hours for the day
01/06/00	07:07 to 15:04	7.95 hours	7.95 hours for the day
01/07/00	07:00 to 15:09	8.15 hours	8.15 hours for the day
01/10/00	07:06 to 15:13	8.12 hours	8.12 hours for the day
01/11/00	07:05 to 15:06	8.02 hours	8.02 hours for the day
01/12/00	07:09 to 15:09	8.00 hours	8.00 hours for the day
01/13/00	07:02 to 15:12	8.17 hours	8.17 hours for the day
01/14/00	07:01 to 15:02	8.02 hours	8.02 hours for the day

80.73 hours total
0.73 in overtime
making effective payable hours of 81.10
at \$15.00 per hour

Gross Earnings: \$1,216.50

Control Panel:
Type of Report: Employee Wages
To be printed on: Monitor
Overtime calculated per California rules:
Date Range: 1/1/00 to 1/15/00
Buttons: BN, Produce Report, Exit

Like the Commissions Report, it applies whatever wage rate is established, for the employee, in the *EarningsRates* form (quickkey is **Alt-F2**). It does not calculate withholdings (raw earnings only)—meaning it's up to you (or a payroll service) to independently do the latter.

Chapter 4

The Accounts Receivable Report

This report is available in two forms. One tabulates all your A/Rs as a group:

AGING OF ACCOUNTS RECEIVABLE
status as of 12:03 pm, 03/31/09

FACE VALUES (reflecting totals as per original invoices, where any portion is still due):

	High Volume Clients	Other Customers	All
Zero to 30 days	\$0.00	\$0.00	\$0.00
31 to 60 days	\$0.00	\$0.00	\$0.00
61 to 90 days	\$0.00	\$0.00	\$0.00
91 to 120 days	\$0.00	\$0.00	\$0.00
over 120 days	\$21,225.55	\$5,648.26	\$26,873.81
TOTALS	\$21,225.55	\$5,648.26	\$26,873.81
Average Age	3,455 days	3,203 days	3,401 days

AS ADJUSTED FOR AMOUNTS PAID-TO-DATE (i.e., deducting any amounts as partly paid against totals):

	High Volume Clients	Other Customers	All
Zero to 30 days	\$0.00	\$0.00	\$0.00
31 to 60 days	\$0.00	\$0.00	\$0.00
61 to 90 days	\$0.00	\$0.00	\$0.00
91 to 120 days	\$0.00	\$0.00	\$0.00
over 120 days	\$12,717.06	\$5,103.83	\$17,820.89
TOTALS	\$12,717.06	\$5,103.83	\$17,820.89

(note that in this and other displays that offer no dedicated print function, you can use ServiceDesk's "Miscellaneous" print utility, accessed by pressing Ctrl-P)

Exit

The other provides individual breakdowns per individual HighVolumeClients.

AGING OF ACCOUNTS RECEIVABLE
(HighVolumeClients Only)
status as of 12:06 pm, 03/31/09

	0-30	31-60	61-90	91-120	120 plus	Total	Average Days Old
GHS	\$0.00	\$0.00	\$0.00	\$0.00	\$3,766.00	\$3,766.00	3,221
FKH	\$0.00	\$0.00	\$0.00	\$0.00	\$1,495.31	\$1,495.31	3,343
CHN	\$0.00	\$0.00	\$0.00	\$0.00	\$2,324.90	\$2,324.90	3,324
UJH	\$0.00	\$0.00	\$0.00	\$0.00	\$157.00	\$157.00	3,389
CHH	\$0.00	\$0.00	\$0.00	\$0.00	\$1,850.00	\$1,850.00	3,172
OLD	\$0.00	\$0.00	\$0.00	\$0.00	\$1,165.21	\$1,165.21	1,862
FNH	\$0.00	\$0.00	\$0.00	\$0.00	\$2,692.50	\$2,692.50	3,525
	\$0.00	\$0.00	\$0.00	\$0.00	\$12,717.06	\$12,717.06	3,455

(note that in this and other displays that offer no dedicated print function, you can use ServiceDesk's "Miscellaneous" print utility, accessed by pressing Ctrl-P)

Exit

Regardless of type of A/R Report you choose, the underlying machinery reads its data directly from your A/R file—the same data that may be reviewed, on a record-by-record basis, in the A/R-Read form (quickkey is **F3**).

Chapter 5

The Profitability Report

This report lists each job as completed within a specific time frame, and for each shows three simple figures (revenue, job cost, and resulting margin). The cost figure is based on a combination of parts used and labor inputs (figuring via user-provided inputs for per-trip and hourly costs for technicians).

Jobs Profitability Report, 12/3/09 to 12/3/09						
			Revenue	Cost	Margin	
12-03-09	AV	FRG-WINFI	175172	71.00	24.50	46.50
12-03-09	OF	MILLER	175474	344.25	131.18	213.07
12-03-09	CP	SHOWMAN	175350	63.70	35.00	28.70
12-03-09	RA	LGZ-BLUHM	175297	116.16	42.16	74.00
12-03-09	OF	HINZ	175582	66.88	42.16	24.72
12-03-09	CP	GEW-Koss	174523	-67.00	50.00	-117.00
			594.99	325.00	269.99	

Found 1 POS transactions, totalling \$66.88

The underlying mechanics are as follows:

1. The system begins by looking, one-by-one, at each SalesJournal entry (Paycode 1 or 2) that fits within the user-specified date range. It tallies revenue amounts on this basis.
2. For each such entry, it seeks to find a matching JobRecord.
3. If from the JobRecord it appears the sale involved a POS situation (system looks in the job's historical narrative for the phrase "(POS context)"), the transaction is excluded from the main tally figures (in such a case there will be a note at the report bottom that tallies POS items separately).
4. It tallies quantity of trips, on each job, by reading in the narrative job history.

5. It tallies time on spent, on each job, by reading in the narrative job history.
6. It tallies cost of parts used by searching for job-matching entries in the PartsProcess file, archived-PartsProcess file and InventoryJournal (quickkey entries for direct review of these contexts are, respectively, **F8**, **Ctrl-F8** and **F10>Review-Purchases-and-Usage**).
7. It tallies LaborCost on the basis of user-provided trip-cost multiplied by quantity, then adds user-provided hourly-cost multiplied by time spent.

Please note that the underlying file, as simultaneously created when this report compiles for you, has added data breakdowns (separating parts cost factors from labor costs factors, for example). For such added detail, simply click on the button to open that file.

Chapter 6

The Quality of Service Report (Performance Analysis – Clients)

This report produces a series of figures (amounts involved in sales, averages per job, recall rates, etc.) that help you assess the level of work that's being done for each of your HighVolumeClients, and to compare these parameters between such parties, and as compared to your non-HighVolumeClient work, both at a group level and individually.

Business Reports				
Report on Service Performed. 1/1/01 to 12/31/01				
All Service	3,287 original, 47 recalls	1.41% Recall Rate	Avg Trips/Job: 1.56	
3,334 Completions	\$119,553.29 Ttl Materials	\$35.86 Avg Materials	Avg Hours/Job: 1.11	
\$396,051.00 Total Sales	\$267,524.25 Ttl Labor	\$80.24 Avg Labor	Avg Days frm StrtToCmplt: 6.3	
Non-HVC's	2,528 original, 0 recalls	0.00% Recall Rate	Avg Trips/Job: 1.50	
2,528 Completions	\$89,595.21 Ttl Materials	\$35.44 Avg Materials	Avg Hours/Job: 1.06	
\$303,467.86 Total Sales	\$207,150.57 Ttl Labor	\$81.94 Avg Labor	Avg Days frm StrtToCmplt: 5.5	
All-HVC's	759 original, 47 recalls	5.83% Recall Rate	Avg Trips/Job: 1.76	
806 Completions	\$29,959.08 Ttl Materials	\$37.17 Avg Materials	Avg Hours/Job: 1.29	
\$92,583.14 Total Sales	\$60,373.68 Ttl Labor	\$74.91 Avg Labor	Avg Days frm StrtToCmplt: 9.1	
AHS	465 original, 35 recalls	7.00% Recall Rate	Avg Trips/Job: 1.76	
500 Completions	\$18,779.64 Ttl Materials	\$37.56 Avg Materials	Avg Hours/Job: 1.35	
\$58,900.33 Total Sales	\$38,711.43 Ttl Labor	\$77.42 Avg Labor	Avg Days frm StrtToCmplt: 9.3	
GE	0 original, 0 recalls	--- Recall Rate	Avg Trips/Job: ---	
0 Completions	\$0.00 Ttl Materials	--- Avg Materials	Avg Hours/Job: ---	
\$0.00 Total Sales	\$0.00 Ttl Labor	--- Avg Labor	Avg Days frm StrtToCmplt: ---	
FAM	52 original, 2 recalls	3.70% Recall Rate	Avg Trips/Job: 1.73	
54 Completions	\$2,124.08 Ttl Materials	\$39.33 Avg Materials	Avg Hours/Job: 1.42	
\$6,751.78 Total Sales	\$4,468.25 Ttl Labor	\$82.75 Avg Labor	Avg Days frm StrtToCmplt: 10.9	
CON	0 original, 0 recalls	--- Recall Rate	Avg Trips/Job: ---	
0 Completions	\$0.00 Ttl Materials	--- Avg Materials	Avg Hours/Job: ---	
\$0.00 Total Sales	\$0.00 Ttl Labor	--- Avg Labor	Avg Days frm StrtToCmplt: ---	
UA	0 original, 0 recalls	--- Recall Rate	Avg Trips/Job: ---	
0 Completions	\$0.00 Ttl Materials	--- Avg Materials	Avg Hours/Job: ---	
\$0.00 Total Sales	\$0.00 Ttl Labor	--- Avg Labor	Avg Days frm StrtToCmplt: ---	
ES	0 original, 0 recalls	--- Recall Rate	Avg Trips/Job: 2.00	
0 Completions	\$0.00 Ttl Materials	--- Avg Materials	Avg Hours/Job: 0.08	
(\$35.00) Total Sales	(\$35.00) Ttl Labor	--- Avg Labor	Avg Days frm StrtToCmplt: 2.0	
CCH	2 original, 0 recalls	0.00% Recall Rate	Avg Trips/Job: 1.50	
2 Completions	\$35.80 Ttl Materials	\$17.90 Avg Materials	Avg Hours/Job: 1.33	
\$195.49 Total Sales	\$157.00 Ttl Labor	\$78.50 Avg Labor	Avg Days frm StrtToCmplt: 5.5	
AON	41 original, 0 recalls	0.00% Recall Rate	Avg Trips/Job: 1.79	
41 Completions	\$1187.55 Ttl Materials	\$28.96 Avg Materials	Avg Hours/Job: 1.03	
\$4,018.69 Total Sales	\$2,742.00 Ttl Labor	\$66.88 Avg Labor	Avg Days frm StrtToCmplt: 6.6	
OLD	1 original, 0 recalls	0.00% Recall Rate	Avg Trips/Job: 4.00	
1 Completions	\$146.60 Ttl Materials	\$146.60 Avg Materials	Avg Hours/Job: 2.58	
\$228.60 Total Sales	\$131.00 Ttl Labor	\$131.00 Avg Labor	Avg Days frm StrtToCmplt: ---	
BHV	0 original, 0 recalls	--- Recall Rate	Avg Trips/Job: ---	
0 Completions	\$0.00 Ttl Materials	--- Avg Materials	Avg Hours/Job: ---	
\$0.00 Total Sales	\$0.00 Ttl Labor	--- Avg Labor	Avg Days frm StrtToCmplt: ---	
FNW	198 original, 10 recalls	4.81% Recall Rate	Avg Trips/Job: 1.75	
208 Completions	\$7,684.42 Ttl Materials	\$36.94 Avg Materials	Avg Hours/Job: 1.16	
\$22,463.25 Total Sales	\$14,199.00 Ttl Labor	\$68.26 Avg Labor	Avg Days frm StrtToCmplt: 8.9	

Encountered 17 SalesJournal entries on which corresponding JobRecords were not found.
If you'd like to see a list of these items, it's been copied into your Windows clipboard.

Type of Report

Sales Summary

Commissions Earned

Employee Wages

Performance - Clients

Quality of Service

Margin Analysis

To be printed on

Monitor

Printer

1/1/01
to
12/31/01

Produce Report

Exit

The underlying mechanics, as involved in producing the report, are as follows:

1. The system begins by looking, one-by-one, at each SalesJournal entry (Paycode 1 or 2) that fits within your specified date range. It tallies sale amounts on this basis.
2. For each such entry, it seeks to find a matching JobRecord.
3. If from the JobRecord it appears the sale involved a POS situation (system looks in the job's historical narrative for the phrase "(POS context)"), the

transaction is excluded from the main tally figures (in such a case there will be a note at the report bottom that tallies POS items separately).

4. It determines whether to tally each particular job as a recall by using the "key-word" method (i.e., it looks for "RECALL", "RE-CALL", "CALLBACK" or "C/B" in the job's Description/Complaint box).
5. It tallies quantity of trips, on each job, by reading in the narrative job history.
6. It tallies time spent, on each job, by reading in the narrative job history.
7. It tallies quantity of days from start to finish, on each job, by counting the days between the job's OriginDate and the date of last technician visit.

Chapter 7

The Margin Analysis Report (Performance Analysis – Clients)

This report produces a series of figures (quantity of trips, quantity of time, etc., as compared to revenue) designed to help you assess profitability of work as connected to each of your HighVolumeClients, comparing between such parties, and to your non-HighVolumeClient work (again, both at a group level and individually).

Business Reports						
Margin Analysis Report, 1/1/01 to 12/31/01						
5,773 Trips	\$119,553.29 Parts Revenue	\$0.00 Parts Cost	\$119,553.29 Parts Margin	All Service	Avg Mrgn =	
3,902.4 Hours*	\$267,524.25 Labor Revenue	\$193,147.00 Labor Cost	\$74,377.25 Labor Margin			
3,334 Jobs	\$387,077.54 Total Revenue	\$193,147.00 Total Cost	\$193,930.53 Total Margin		\$58.17	
4,316 Trips	\$89,595.21 Parts Revenue	\$0.00 Parts Cost	\$89,595.21 Parts Margin	Non-HVCs	Avg Mrgn =	
2,857.4 Hours*	\$207,150.57 Labor Revenue	\$143,106.67 Labor Cost	\$64,043.90 Labor Margin			
2,528 Jobs	\$296,745.78 Total Revenue	\$143,106.67 Total Cost	\$153,639.11 Total Margin		\$60.77	
1,457 Trips	\$23,958.08 Parts Revenue	\$0.00 Parts Cost	\$23,958.08 Parts Margin	All-HVCs	Avg Mrgn =	
1,045 Hours*	\$60,373.68 Labor Revenue	\$50,040.33 Labor Cost	\$10,333.35 Labor Margin			
806 Jobs	\$90,331.76 Total Revenue	\$50,040.33 Total Cost	\$40,291.43 Total Margin		\$49.99	
897 Trips	\$18,779.64 Parts Revenue	\$0.00 Parts Cost	\$18,779.64 Parts Margin	AHS	Avg Mrgn =	
674.8 Hours*	\$38,711.43 Labor Revenue	\$31,431.67 Labor Cost	\$7,279.76 Labor Margin			
500 Jobs	\$57,491.07 Total Revenue	\$31,431.67 Total Cost	\$26,059.40 Total Margin		\$52.12	
0 Trips	\$0.00 Parts Revenue	\$0.00 Parts Cost	\$0.00 Parts Margin	GE	Avg Mrgn =	
---- Hours*	\$0.00 Labor Revenue	\$0.00 Labor Cost	\$0.00 Labor Margin			
0 Jobs	\$0.00 Total Revenue	\$0.00 Total Cost	\$0.00 Total Margin		----	
95 Trips	\$2,124.08 Parts Revenue	\$0.00 Parts Cost	\$2,124.08 Parts Margin	FAM	Avg Mrgn =	
76.8 Hours*	\$4,468.25 Labor Revenue	\$3,435.67 Labor Cost	\$1,032.58 Labor Margin			
54 Jobs	\$6,592.33 Total Revenue	\$3,435.67 Total Cost	\$3,156.66 Total Margin		\$58.46	
0 Trips	\$0.00 Parts Revenue	\$0.00 Parts Cost	\$0.00 Parts Margin	CON	Avg Mrgn =	
---- Hours*	\$0.00 Labor Revenue	\$0.00 Labor Cost	\$0.00 Labor Margin			
0 Jobs	\$0.00 Total Revenue	\$0.00 Total Cost	\$0.00 Total Margin		----	
0 Trips	\$0.00 Parts Revenue	\$0.00 Parts Cost	\$0.00 Parts Margin	UA	Avg Mrgn =	
---- Hours*	\$0.00 Labor Revenue	\$0.00 Labor Cost	\$0.00 Labor Margin			
0 Jobs	\$0.00 Total Revenue	\$0.00 Total Cost	\$0.00 Total Margin		----	
2 Trips	\$0.00 Parts Revenue	\$0.00 Parts Cost	\$0.00 Parts Margin	ES	Avg Mrgn =	
1 Hours*	(\$35.00) Labor Revenue	\$41.67 Labor Cost	(\$76.67) Labor Margin			
0 Jobs	(\$35.00) Total Revenue	\$41.67 Total Cost	(\$76.67) Total Margin		----	
3 Trips	\$35.80 Parts Revenue	\$0.00 Parts Cost	\$35.80 Parts Margin	CCH	Avg Mrgn =	
2.7 Hours*	\$157.00 Labor Revenue	\$113.33 Labor Cost	\$43.67 Labor Margin			
2 Jobs	\$192.80 Total Revenue	\$113.33 Total Cost	\$79.47 Total Margin		\$39.73	
77 Trips	\$1,187.55 Parts Revenue	\$0.00 Parts Cost	\$1,187.55 Parts Margin	AON	Avg Mrgn =	
43.3 Hours*	\$2,742.00 Labor Revenue	\$2,405.33 Labor Cost	\$336.67 Labor Margin			
41 Jobs	\$3,929.55 Total Revenue	\$2,405.33 Total Cost	\$1,524.22 Total Margin		\$37.18	
4 Trips	\$146.60 Parts Revenue	\$0.00 Parts Cost	\$146.60 Parts Margin	OLD	Avg Mrgn =	
2.6 Hours*	\$131.00 Labor Revenue	\$131.67 Labor Cost	(\$0.67) Labor Margin			
1 Jobs	\$277.60 Total Revenue	\$131.67 Total Cost	\$145.93 Total Margin		\$145.93	
0 Trips	\$0.00 Parts Revenue	\$0.00 Parts Cost	\$0.00 Parts Margin	BHW	Avg Mrgn =	
---- Hours*	\$0.00 Labor Revenue	\$0.00 Labor Cost	\$0.00 Labor Margin			
0 Jobs	\$0.00 Total Revenue	\$0.00 Total Cost	\$0.00 Total Margin		----	
379 Trips	\$7,684.42 Parts Revenue	\$0.00 Parts Cost	\$7,684.42 Parts Margin	FNW	Avg Mrgn =	
245.1 Hours*	\$14,199.00 Labor Revenue	\$12,481.00 Labor Cost	\$1,718.00 Labor Margin			
208 Jobs	\$21,883.42 Total Revenue	\$12,481.00 Total Cost	\$9,402.41 Total Margin		\$45.20	

Encountered 17 SalesJournal entries on which corresponding JobRecords were not found.
If you'd like to see a list of these items, it's been copied it into your Windows clipboard.

The underlying mechanics are as follows:

8. The system begins by looking, one-by-one, at each SalesJournal entry (Paycode 1 or 2) that fits within the user-specified date range. It tallies sale amounts on this basis.
9. For each such entry, it seeks to find a matching JobRecord.
10. If from the JobRecord it appears the sale involved a POS situation (system looks in the job's historical narrative for the phrase "(POS context)"), the transaction is excluded from the main tally figures (in such a case there will be a note at the report bottom that tallies POS items separately).
11. It tallies quantity of trips, on each job, by reading in the narrative job history.

12. It tallies time on spent, on each job, by reading in the narrative job history.
13. It tallies cost of parts used by searching for job-matching entries in the PartsProcess file, archived-PartsProcess file and InventoryJournal (quickkey entries for direct review of these contexts are, respectively, **F8**, **Ctrl-F8** and **F10>Review-Purchases-and-Usage**).
14. It tallies LaborCost on the basis of user-provided trip-cost multiplied by quantity, then adds user-provided hourly-cost multiplied by time spent.

Please note that, for margin figures to be accurate, the user-query-provided *trip-cost* and *hourly-cost* figures must, in turn, be accurate. It raises the question as to how you arrive at such figures. Our suggestion is, run the report once using whatever seat-of-the-pants guess you wish, for these figures. Run once, the report will provide total trips for the period and total on-the-job hours for the period. Go to your financial accounting and find what your total expenses were for the period. Figure half the total expense as trip cost, and divide by quantity of trips to get per-trip-cost. Figure the other half as hourly/time cost, and divide by total hours to get hourly cost. Then run the report again with these figures.

As another note, please observe that even if your provided cost-basis figures are not accurately, you'll likely still have valid comparisons between one HighVolumeClient and another, and between HighVolumeClients and non-HVC work.

Chapter 8

The Result on Dispatches Report (Performance Analysis – Techs)

This is one of our newer Technician Productivity reports (introduced January 2012). Its purpose is to provide some fairly raw numbers showing just what each tech has done with the dispatches given him (i.e., how many resulted in completions, how many in part orders, etc.).

The report's output loads into Excel, and on that basis takes advantage of greater width availability than can display well in this manual. Nevertheless, here's a shrunken image to give you some idea of what's involved:

DISPATCHES PERFORMANCE REPORT 12/1/11 to 12/31/11																												
Dispatches Total/All										Dispatches Return Visit								Dispatches New/Original Visit										
Total Assigned	Completed		Parts Ordered		No-Shows		No disposition		Total Assigned	Completed		Parts Ordered		No-Shows		No disposition		Total Assigned	Completed		Parts Ordered		No-Shows		No disposition			
	Qty	Prnt	Qty	Prnt	Qty	Prnt	Qty	Prnt		Qty	Prnt	Qty	Prnt	Qty	Prnt	Qty	Prnt		Qty	Prnt	Qty	Prnt	Qty	Prnt	Qty	Prnt		
Whole Team	1018	671	65.9	174	17.1	45	4.4	128	12.6	202	164	81.2	26	12.9	0	0	12	5.9	816	507	62.1	148	18.1	45	5.5	116	14.2	
Gary Gleeson	185	122	65.9	36	19.5	12	6.5	15	8.1	54	44	81.5	8	14.8	0	0	2	3.7	131	78	59.5	28	21.4	12	9.2	13	9.9	
Ken McDonald	182	140	76.9	0	0	1	0.5	41	22.5	12	12	100	0	0	0	0	0	0	170	128	75.3	0	0	1	0.6	41	24.1	
Roger Barrington	204	138	67.6	46	22.5	8	3.9	12	5.9	41	31	75.6	6	14.6	0	0	4	9.8	163	107	65.6	40	24.5	8	4.9	8	4.9	
Mark Hayward	196	136	69.4	45	23	4	2	11	5.6	42	37	88.1	5	11.9	0	0	0	0	154	99	64.3	40	26	4	2.6	11	7.1	
Steven Morgan	26	19	73.1	1	3.8	0	0	6	23.1	4	4	100	0	0	0	0	0	0	22	15	68.2	1	4.5	0	0	6	27.3	
Jim Shea	224	115	51.3	46	20.5	20	8.9	43	19.2	49	36	73.5	7	14.3	0	0	6	12.2	175	79	45.1	39	22.3	20	11.4	37	21.1	
(no current tech)	1	1	100	0	0	0	0	0	0	0	0	n/a	0	n/a	0	n/a	0	n/a	1	1	100	0	0	0	0	0	0	0

The report's methodology is as follows:

1. This system reads within your Archived-ScheduleList, finding all appointments that fit within the requested date range.
2. It iterates through that set of appointments, once for your operation as a whole, then for each tech in your current roster, then for any appointments that have not tech assignment, or whose assignment is to other than a current-roster tech.
3. As it works with each particular appointment, it uses the appointment's CheckOff symbol to deduce whether the appointment should be deemed the job having been "Completed" (Heart symbol), in a customer "No-Show" (Diamond symbol), or otherwise.
4. If the CheckOff symbol is otherwise (i.e., not a Heart symbol or Diamond symbol), the system examines the narrative history within the applicable JobRecord (assuming the same can be found, which in virtually all cases should be true) to see whether parts were ordered; if so, the appointment is scored in the "Parts Ordered" category). If in this mode (i.e., the appointment did not have either a heart or diamond symbol) and there is no evidence in the narrative history that parts were ordered, the appointment/dispatch is scored within the "No disposition" category.
5. The system iterates through as per above three different times. First it does it for *all* appointments (blue section in the above-illustrated output). Then it does for appointments that, based on the system looking in each item's relevant JobHistory, it is able to deduce had a prior-fulfilled appointment (pink section in

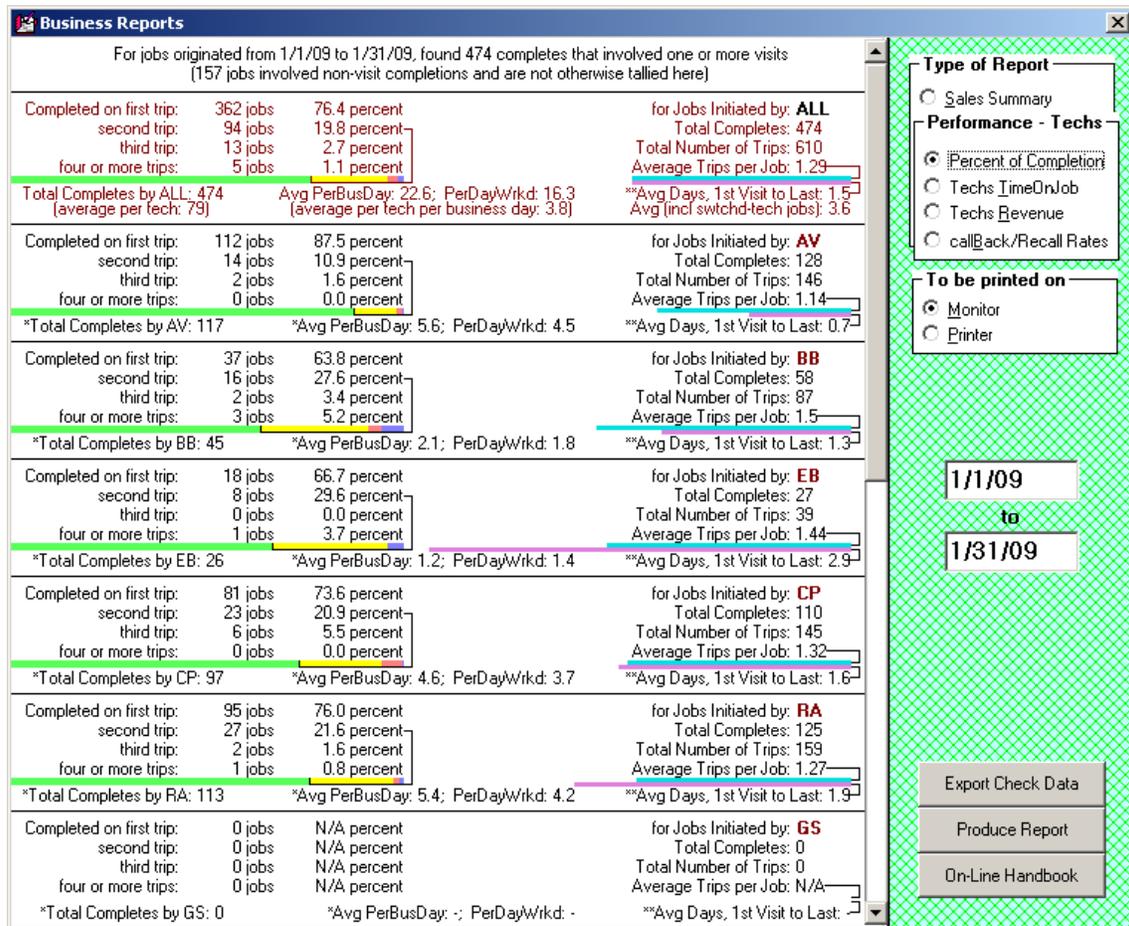
the above-illustrated output). Finally, it does it for those appointments where there was not basis, upon reading an applicable JobHistory, to conclude there had been prior appointments (green section in above-illustrated output).

6. Based on the quantities and percents as tallied via each of the above-described iterations, the system enters resulting data into an Excel spreadsheet in the pattern as shown above.

Chapter 9

The Percent of Completion Report (Performance Analysis – Techs)

This report produces a set of figures that help you assess, on a comparison basis between technicians, how well each is doing in terms of completing on the first visit, versus second, versus third, versus requiring four or more trips for completion. It also allows a comparison of comparative averages, total quantity of jobs completed, etc.



Please note how the leftward graph allows you to visually compare (and at a glance) how your techs are comparing in regard to needing more than one trip, or not (you can easily see via comparative yellow/red/blue bands, for example, that BB is comparing poorly). The two rightward graphs (cyan and violet) similarly allow at-a-glance comparison of how the techs compare on average trips-per-job and average days start-to-completion.

In the case of all graphs, it's also easy to compare with company-wide averages and numbers, as shown in the top/red section. Indeed, you can think of the company-side values as providing a "par" figure, against which each tech can be compared.

Methodology for this report is as follows:

1. The system reads within your archived JobRecords, beginning at the most recent, and working toward the oldest.
2. It continues reading in such succession until having either: (a) reached record position 1; or (b) encountered at least 500 records that are older than your specified date range.
3. The determination of whether a job fits within the specified date range is based on its OriginDate.
4. For each job that's found to fit within the date range, the system tallies quantity of visits by reading in the narrative history.
5. For the main section as applicable to each tech, it determines which tech the job should be credited to by looking, in the narrative history, to see which tech was there first. The theory is a different tech might be called upon to finish a job that a less competent one failed to (but should have) finished with fewer trips. It's not the tech who finished, but the one who should have finished earlier that should be charged with multiple trips.
6. For the little final-line section as applicable to each tech (i.e., showing *Total Completes* and *Avg Completes/Business Day*), it concentrates instead on the *last tech* who performed on the job. It would not seem sensible, simply, to credit a mere initiating tech with job completions.
7. For the last figure in that final-line section (i.e., showing *Avg Days from Start To Finish*), the system tallies only those jobs where it's one and the same tech who was there for both the first and final visit. The thinking here is that, for such a figure, if different techs were involved, to tally this figure to either one of them.
8. Please also note that, in regard to that final figure (showing *Avg Days from Start To Finish*), we are counting days between *first visit* and *final visit*—not between the date the job was written and the final visit. Since this is a measure of technician performance, there is no reason to include time between when the customer requested service and the date of the first visit.

In respect *Average-Completes-Per-Business- Day*, please note the first figure is derived on the basis a five-day work week. In other words, the system looks at the date range involved, and figures how many standard *week* days (Monday through Friday) fit within that period. It's on the basis of that figure that it calculates the quantity of standard "business" days, using that figure as the denominator to calculate completes (for the technician who did the complete) per such standard business day.

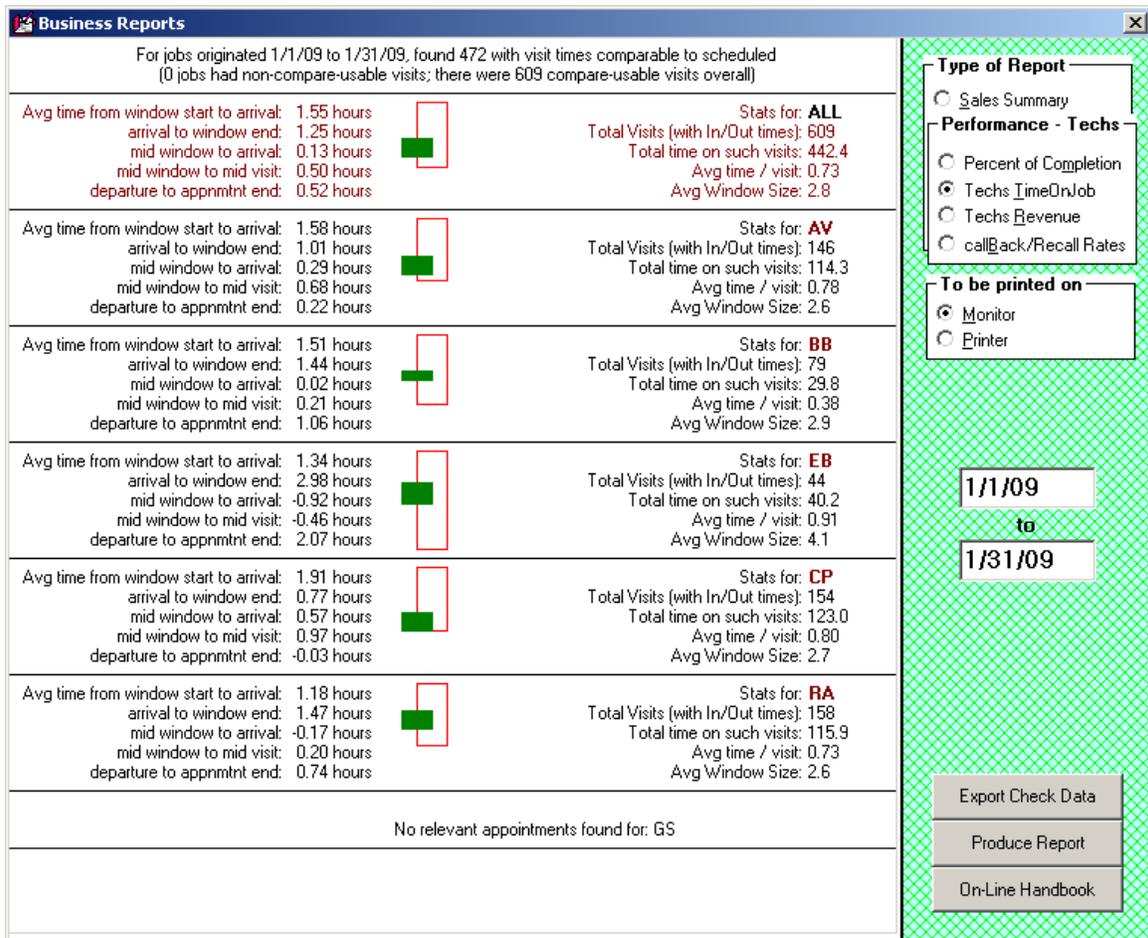
In regard to *Average-Completes-Per-Day-Worked*, by contrast, the system's method is to count, as a day worked by any particular, any day in which there's an entry in an applicable JobRecord showing that he completed a work visit, on a job, on that day. No others days are counted. For the operation as a whole (i.e., "ALL" in the tally), any day on which any tech worked (according to the above-described criteria) is counted as a work day.

Base on the above, you may note some interesting comparisons. Some of your techs may show higher completes per business day than per day worked. For those, it's evident they must have worked more days than are involved in the measure of *standard business days*. Other techs may show higher completes per days worked than per business day. For those, it should be evident that, for the period in question, they worked fewer days than are involved in the measure of *standard business days*. Another interesting factor; you'll likely find less variation, among the techs, in completes per days worked, as opposed to completes per business day.

Chapter 10

The Techs Time On Job Report (Performance Analysis – Techs)

This report produces a set of figures that help you assess, on a comparison basis between technicians, how well each is doing in terms of arriving at and departing from jobs within (and preferably toward the front portion of) scheduled time frames. It further allows a comparison of total time spent on jobs.



Please note the graphic provided in each section. The red rectangle is intended to denote average window size (i.e., of the appointment window for which the tech is scheduled). The green box denotes the average amount of time spent by the tech, per job, and where it fits, time-wise, within the larger appointment window.

You can tell at a glance, for example, that CP (above) is doing badly, in terms of where he's positioning his on-site times compared to appointment windows. BB, on the other hand, is doing much better, and he's very quick (short time on each job) as well. EB is doing the best, in terms of having his on-site time toward the front of appointment windows. On the other hand, he is being given much larger appointment windows (as compared to the other guys) to work with.

Please also again note that the top/red section shows figures and graphs for the operation as a whole. In part, this provides a "par" standard against which individuals may be assessed, but it's also a useful measure on the company as a whole. In this particular case, indeed, a quick glance at the company-wide/top-section graphic shows that, overall, tech on-site times are quite late as compared to appointment windows. Knowing how much customers appreciate having techs on-site early within their appointment windows (and hate it otherwise), this is something that, as an owner/manager, I'd want to strongly address.

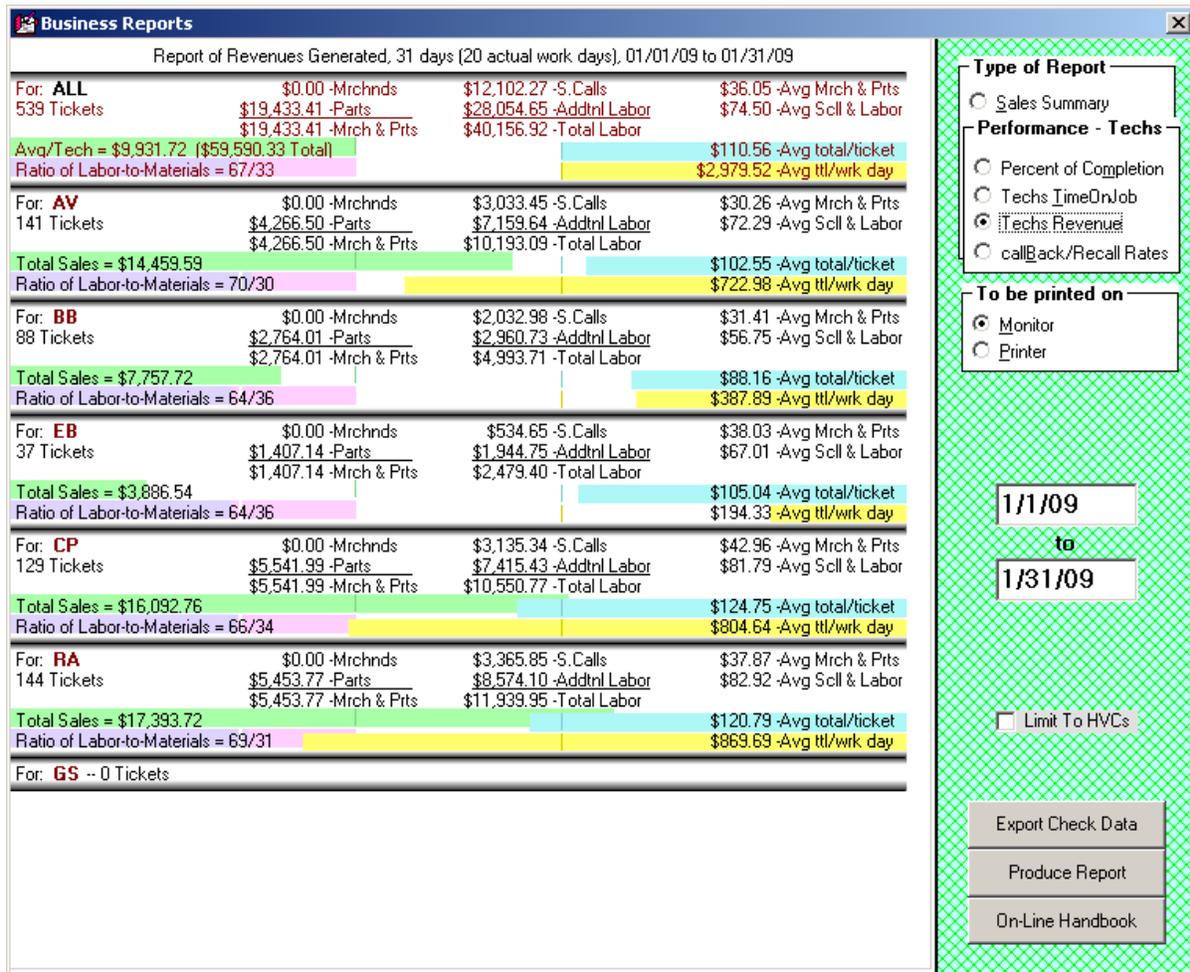
Methodology for this report is as follows:

1. The system reads within your archived JobRecords, beginning at the most recent, and working toward the oldest.
2. It continues reading in such succession until having either: (a) reached record position 1; or (b) encountered at least 500 records that are older than your specified date range.
3. The determination of whether a job fits within the specified date range is based on its OriginDate.
4. For each job that's found to fit within the date range, the system looks in the narrative history to find entries that: (a) describe a tech's visit; and (b) include his start and end times. (Please note, if there are "XX rsppndd"-type entries, that do not include start and end times, these will not be included in this report).
5. For such entry as found, the system looks to a preceding entry that describes the time-frame scheduled.
6. Upon finding any such appropriate pairing (i.e., one entry describing the time-frame scheduled, and another describing the times when the tech was actually there), the system then tallies appropriate comparisons, and compiles for presentation in the report.

Chapter 11

The Techs Revenue Report (Performance Analysis – Techs)

This report produces a set of figures to help you determine, on a comparison basis between technicians, how well each is doing in terms of producing revenue.



There is, again, a top/red section for company-wide values, and a selection of graphics to help with at-a-glance comparisons.

In particular, the top section provides company-wide (or "par") geometries for each measure, with each tech's particular measure purposely arranged to allow easy direct comparison. At a glance, for example (green graphs), you can see that three of the techs (RA especially) are performing well above-par in regard to total sales. Their average totals-per-work-day (yellow graphs) mirror the same fact. However, one of the techs who's strong in total sales, is not so strong in average total-per-ticket (AV, blue graph).

The leftward purple/violet graph is particularly interesting in its ratio-type comparison between labor and materials sold. Glancing at this graph in AV's section may give an immediate clue as to why his average total-per-ticket is below par. It appears, simply, that in comparison to others he is underselling on parts. Perhaps that is all he needs to amend.

Methodology for this report is as follows:

1. The system reads in your SalesJournal file, and determines the range of entries that fits within your date-range specification.
2. For each entry within that range, it uses the *Technician* field to determine the tech to whom the sale should be attributed, and tallies accordingly.

Chapter 12

Callback/Recall-Rates, UnitInfo Method (Performance Analysis – Techs)

This is one of two *Recall-Rate* reports. Two methods are provided because, as a design matter, we want to avoid imposing on users the burden of having to make a human-based judgment, in every potential instance, as to whether a job should *properly* be classified as a recall. We think that is (or would be, if required) a nasty burden, particularly since it's fraught with the potential of time-consuming (and emotion taxing) argument with technicians, upset, and so on. We think it's better to have a system that allows valid comparison of recall rates, between techs, even while knowing the absolute numbers will likely include some percentage of instances that are charged as recalls inappropriately.

This particular report gives total quantity of jobs for each tech, total that are classified as recalls, and a resulting recall percent figure. It also provides graphs to provide an at-a-glance sense of comparison. The horizontal aspect in these graphs is obvious. The varying thickness of each graph may not be. The thickness varies, simply, to provide a visual indicator as to comparative quantities of work being done. If Tech A has a slightly higher recall rate as compared to Tech B, but is doing twice as much work, it may not seem so bad as otherwise.

Business Reports

Report on Callback Rates (UnitInfo Method)
Tallying for Jobs Closed Between 1/1/09 and 1/31/09
(for each job, finding if another was commenced on the same machine within 30 days)

Arthur Vondrak	141 jobs completed 2 had a followup	1.4 %
Benjamin Butcher	88 jobs completed 3 had a followup	3.4 %
Eugene Butcher	37 jobs completed 0 had a followup	0 %
Chad Phillipp	129 jobs completed 3 had a followup	2.3 %
Robert Arotin	144 jobs completed 6 had a followup	4.2 %
Greg schultz	0 jobs completed 0 had a followup	n/a

Please note: This report will suffer greatly in accuracy if you do not regularly attach an appropriate UIS to each JobRecord, and especially if you have tech's who do so at greatly varying rates. You might, for example, have a tech with half the true recall rate as another, but who dutifully attached UIS's at four times the rate. In thanks for his good work, he'd end up (erroneously) showing twice the recall rate.

Also note that if you want to review which particular jobs were charged to which techs as recalls, you may create a file for this purpose. Just click on the 'Export Check Data' button.

Type of Report

- Sales Summary
- Performance - Techs**
 - Percent of Completion
 - Techs TimeOnJob
 - Techs Revenue
- Callback Reports**
 - UIS Method
 - Key Word Method

1/1/09
to
1/31/09

Export Check Data
Produce Report
On-Line Handbook

Its underlying theory is that, if your company was called back to service the same underlying machine again, within 30-days¹ of a previous (and supposedly *complete*) job on that machine, there's a pretty good chance the earlier work was not sufficiently complete or perfect. We automatically classify any such within-30-days-of-a-previous-completed-job situation as a recall, though knowing some are not. The thinking is, sure, the figures might be a little higher than actual guilt in our technicians' work. However, in the absence of any good reason why one tech should suffer greater such inflation than another, the figures remain totally valid for comparison purposes.

To illustrate, let's suppose (simply for argument's sake) "2 percent" happens to be the rate at which you get new jobs on the same machine within 30 days of a previous completed job—and for reasons not related to inadequacy in a tech's prior work. In other words, that's the "innocent" rate. Tech A shows on the report with a 4 percent recall rate, and Tech B shows with 5 percent. As far as *true/guilty* rates are concerned (i.e., jobs where you had to go back because of inadequacies in prior work), it's easy (given our assumption of an innocent base at 2 percent) to deduce *real* numbers for both at 2 and 3 percent, respectively (i.e., after subtracting the innocent base).

However, the subtraction is not necessary (and you likely don't know the innocent base regardless). Looking solely at the raw numbers, it's apparent Tech A is performing better -- in terms of getting it right the first time -- as compared to Tech B. That comparative basis, really, is what you most need.

Methodology for producing this report is as follows:

1. The system finds the section in your SalesJournal that contains sales entries fitting the date range you've specified.
2. It reads through each item, and looks to see if the UnitInfo table has a UIS record attached to the applicable InvoiceNumber.
3. If yes, it looks to see if the same UIS record is also attached to a more recent ticket. If so, it opens and examines that ticket (if there are multiple more recent tickets, it's solely the *next*-more-recent one that it checks).
4. In that examination, it looks to see if the origin date on that more-recent ticket is within 30-days of the closing date, as involved in the originally-found entry, from the SalesJournal.
5. If so, it figures: "Aha, I've got an ostensive recall."
6. It then tallies the information, charging the "recall" to the tech who was credited with completion in the first-found SalesJournal entry.

¹ The quantity of days as involved in this comparison can be user-specified, but defaults at 30. Continuing discussion will assume 30-days, though in fact you may specify otherwise.

If you used this report prior to ServiceDesk Ver 4.4.49, please note the present strategy is virtually opposite to what preceded it.

In present strategy, the system looks at *jobs closed* within your specified date range, and for each looks *downward* in the data, seeking to find if there was a *subsequent* job within the specified number of days and on the same machine. In the old strategy, it looked to find *jobs that originated* within your specified date range, and for those looked *upward* in the data seeking to find if there was a *prior* job within the specified number of days and on the same machine.

There are significant consequences in this distinction. With the old method, the *guilty* work as being reported (i.e., jobs performed by techs where new work was needed thereafter) was actually offset 30-days prior-in-time as compared to the your specified date-range. Thus, you were essentially determining how your techs performed, recall-wise, 30-days prior to your date-range. Though slightly weird, it was an inherent consequence of how the method was structured. One benefit was, there was no impediment against picking a date-range including dates right up to the present.

With the new structure, that offset is eliminated. It produces results showing guilt as pertaining quite precisely to your specified date-range. But again, there's a downside. Here it is not practical to pick a date-range that is not at least 30-days prior to the present. The simple reason is, there have not yet that quantity of days -- to see if a new job comes up within that period.

Please note that after this report compiles, a button appears in the form (labeled 'Export Check Data') that allows you to create a file that lists the jobs being charged, to each respective tech, as recalls. This is needed when you have that particular tech who denies there is any possibility he's had so many recalls. For that situation, you can use the list to go through each and every item with him, proving that each fit the design criteria. Sometimes you have to *prove* to a tech that he needs improvement—before he *believes* he needs improvement.

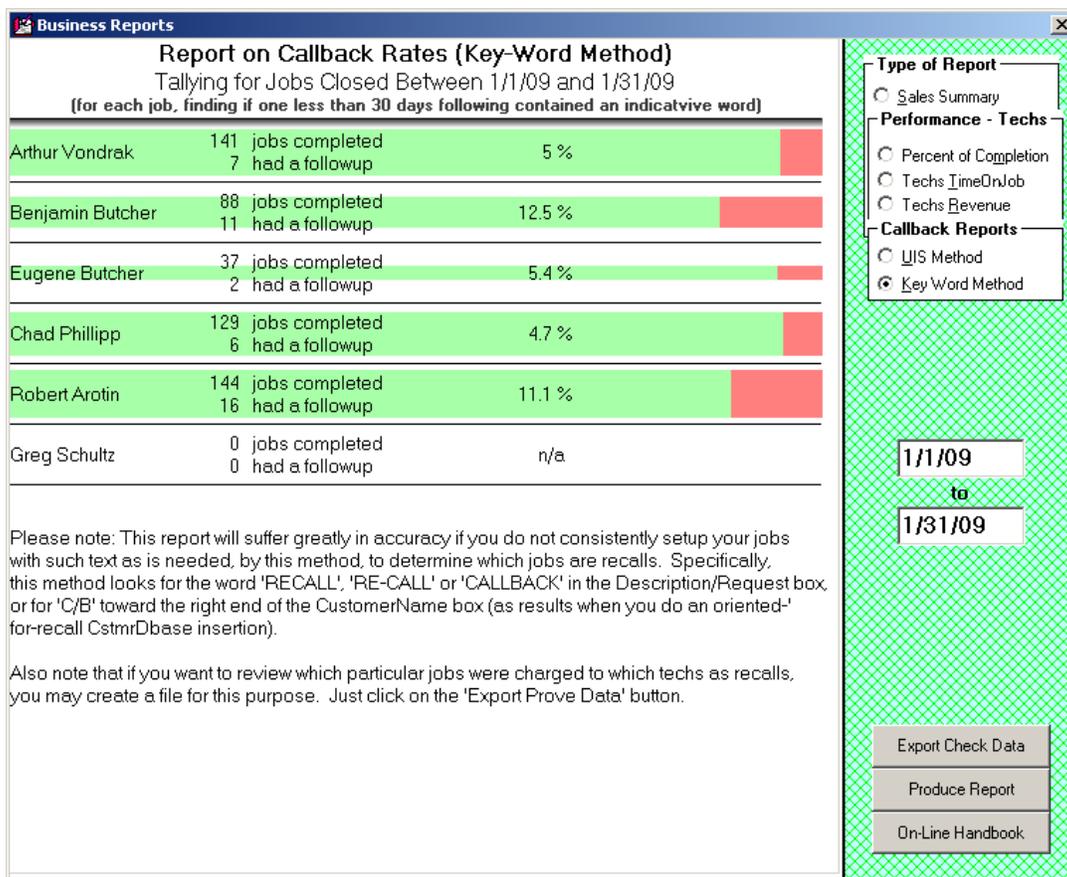
Please further note the methodology in this report fundamentally depends on faithful creation and attachment of UnitInfo sheets, as applicable to each job. If it is not your practice to do this, the entire basis of this report fails—and you'd better consider using its alternative, instead.

Chapter 13

Callback/Recall-Rates, Key-Word Method (Performance Analysis – Techs)

This is the second of two *Recall-Rate* reports. Again (and to reiterate from explaining the same in conjunction with describing the first method), two methods are provided because, as a design matter, we want to avoid imposing on users the burden of making a human-based judgment in every potential instance as to whether a job should *properly* be classified as a recall. We think that is (or would be) a nasty burden, particularly since it's fraught with the potential of time-consuming (and emotion taxing) argument with technicians. We think, in short, it's better to have a system that allows valid comparison of recall rates, even while knowing the absolute numbers will likely include some percentage that are charged as recalls inappropriately.

As you'll see by comparing to the report produced via the Unit-Info method, the display method on this report is all-but identical.



It's the method that varies.

The underlying theory in this report is that, when a consumer calls requesting service on the same equipment as was recently serviced, he or she typically makes a point of

saying something along the lines of: "The guy was here just last week, and it's still not fixed." Your call-taker should have right in front of her information (automatically provided by ServiceDesk as she types the consumer's name) as to which tech performed that prior work. If she's trained like the gals were in our office, she'll type something in the Callsheet's Description/Complaint box similar to the following:

STILL LEAKING, DAVE WAS THERE LAST WEEK AND REPLACED THE
DOOR SEAL, POSSIBLE RECALL

This report depends on your call-takers maintaining such a practice. Very simply, it looks for the word "RECALL" (or any of several potential variants) in the Complaint/Description box, and tallies jobs as recalls accordingly.

Specifically, the methodology is:

1. The system finds the section in your SalesJournal that contains sales entries fitting the date range you've specified.
2. It reads through each item, and looks in your CstmrDbase *Address* index for any following jobs at the same address.
3. For any such following jobs as it finds, it looks to see if the underlying JobRecord *Type* and *Make* fields are the same as with the originally found entry.
4. If the above checks as true, the system next looks to see if this following jobs contains any of those magic *key words*.
5. If that proves true, the system then checks to assure the following jobs did not originate more than 30-days (or other user-specified quantity) after the underlying job was closed.
6. If that last check proves valid, the system figures: "Aha, I've got an ostensive recall."
7. It then tallies the information, charging the "recall" to the tech who was credited with completion in the first-found SalesJournal entry.

Much like the Unit-Info method (please see discussion there), in comparison to SD Versions prior to 4.4.49, this one too reverses the direction from which recalls are approached. In other words, instead of looking first for jobs (fitting within a specified date-range) that might potentially be the actual recalls, then delving deeper into the past to find the originating jobs that preceded them, this one looks for originating jobs within the specified date-range, then looks to see if following ones might be recalls.

Just like with the Unit-Info method, it changes how you must view the date-range.

We do have a word of advice in regard to using use the phrase "POSSIBLE RECALL" or similar. We highly recommend using the word "POSSIBLE," and for several reasons:

- (a) It assures the customer you recognize it *might* be a recall situation, but that determination has not been reached until after the present situation is fully diagnosed;
- (b) It assures the technician you're not making an advance judgment that might improperly impugn his prior work; and
- (c) It an on-its-face recognition that, whereas this report is going to tally as "recalls" all jobs that are found with such a key-word in their respective Description/Complaint boxes (and within a specified quantity of days), some particular percentage (unknown, but presumably the same for all techs) will be not-true-recall situations.

In short, if you wish to use this method, be sure to teach your call-takers to consistently put in an appropriate phrase in appropriate instances. Specifically, bee sure they use the word "RECALL" or one of its accepted variants, and (for the sake of the above-described sensibilities) to also always use the word "POSSIBLE."

Just as with the UIS method, this one too may produce numbers somewhat higher than a technician's actual guilt. But again (mirroring the same dynamic), so long as there's no reason why the rate of such "false accusations" should be different for one tech than for another, the report remains very valid for comparison purposes.

In still another parallel with the UIS method, this one too shows a a button on the form (labeled 'Export Check Data') that allows you to create a file that lists the jobs being charged, to each respective tech, as recalls. If you need to see, just click on the button and follow the prompts.

Again, there are two Recall-Report methods. If you don't use the UnitInfo system with regularity, the Key-Word method can be your solution. If you don't insert the key-words when creating jobs, but do use the UnitInfo system with reasonable religiosity, that method can be your solution. Or, you can use and compare both.

In this last regard, please note that the two examples in this section are for the same company and from the same data. Interestingly, overall recall percentages are larger in the Key-Word method report. However, comparisons between the techs remain constant. Look and compare, you'll see.

Chapter 14

The Time Allocations (DTR) Report (Performance Analysis – Techs)

This report was added in May 2012). Its purpose is to allow analysis of how each tech is spending his time -- in particular, how much is spent while "booked-in" at jobsites, as compared to his total time "on-the-clock." It can also reveal such things as typical time lapses between time-clock punch-in and arrival at first job, departure from last job and time-clock punch-out, etc.

The report's output loads into Excel, and on that basis takes advantage of greater width availability than can display well in this manual. Nevertheless, here's a shrunken image to give you some idea of what's involved:

Time-Allocations Report													
Analysis of Tech's Time On-The-Clock (TimeCard Punched-In) as Compared to Time Checked-in at JobSites Spanning 30-Day Period From 4/1/12 to 4/30/12													
	Qty Days Worked	Total Hours On-the-Clock	Per WorkDay Average	Total Hours Checked-in At Worksites	Per WorkDay Average	Percent of Work- Hours at JobSites	Non-Worksite On-the-Clock Hours	Per WorkDay Average	Total of Hours Between Morning Punch-Ins and First Worksite Check-Ins	Per WorkDay Average	Total of Hours Between Last Worksite Check- Outs and Evening Punch-Outs	Per WorkDay Average	
Paul Dervies	20	173.3	8.7	117.4	5.9	67.8	55.9	2.8	11.4	0.6	-13.8	-0.7	
Joseph Esplanade	23	223.1	9.7	109.2	4.7	48.9	113.9	5	31.7	1.4	29.1	1.3	
Jim Zimmerman	22	192.7	8.8	109.7	5	56.9	83.1	3.8	15.8	0.7	9.4	0.4	
Bob Davies	21	245.5	11.7	190.6	9.1	77.6	55	2.6	17.6	0.8	17.5	0.8	
Tom Compano	21	192	9.1	99.3	4.7	51.7	92.7	4.4	12.4	0.6	35.3	1.7	
Terrence Elia	20	186.2	9.3	116.7	5.8	62.7	69.5	3.5	15.2	0.8	9.3	0.5	
Juan Tupelo	23	223.8	9.7	143.3	6.2	64	80.5	3.5	20	0.9	17	0.7	
George Michael	23	197.1	8.6	153.3	6.7	77.8	43.8	1.9	24.8	1.1	7.1	0.3	
Luciano Luga	22	228.1	10.4	151.4	6.9	66.4	76.7	3.5	32.1	1.5	26.2	1.2	
Wentworth Smith	23	244.5	10.6	153.3	6.7	62.7	91.2	4	18.8	0.8	16.5	0.7	
Aaron Oppenheimer	22	240.4	10.9	154	7	64.1	86.4	3.9	13	0.6	3.3	0.1	
Jack Osham	22	194.2	8.8	122.4	5.6	63.1	71.7	3.3	17.4	0.8	-10.9	-0.5	

The report's methodology is as follows:

1. This system reads within your Archived-ScheduleList, finding all appointments that fit within the requested date range.
2. For each such appointment, it finds the the tech involved, and his start and end times when fulfilling the appointment.
3. Based on the above, the system assembles for each tech a list of all appointment time-spreads as involved in each applicable day, as encompassed within the report. For each such day, it further looks in the tech's TimeCard file, for comparison of the time period (or periods) in which he was time-card punched in. It is based on these comparisons that the numbers are compiled.

Please note this report has close relative in the DTR-Viewer as available from within the DispatchMap (F5), when viewing past days. More particularly, if you keyboard press Alt-D while viewing any past day there, the system will view a graphic for each tech that shows the hours he was on the clock, and the portion of all such hours that he was logged in on actual jobs.

Chapter 15

The *Office Persons' Productivity Report* (Performance Analysis – Office)

This report was added in August 2015. Its purpose is to allow analysis of how much each office person has contributed, according to a variety of measures. It's methodology is very simple:

1. It reads in both your current and archived JobRecords, seeking to find all that may potentially have narrative history notes that fit within the date period you have specified for report inclusion.
2. For each date-period-fitting note it finds, it parses the text to determine if it seemingly describes one of several different kinds of tallied events.
3. If the text seems to describe such an event, it looks further to see if it can extract a two-letter code that seems to designate and office person.
4. If it is able to do the above, it tallies that note to a count of such events for that office person.
5. It displays all resulting tallies, in fashion such as this:

Report on Office Persons' Productivity

Tallying through JobHistory notes created between 1/1/15 and 3/31/15

	Jobs Created	Separate Appmnts Made	Appmnt Changes	Items Triaged	PVRs Cmpltd	Actions Parts Process	Claims Submitted	Sales Entries Made	Emails Sent	Flwd A/R Payoffs	Flwd Funds ViaPOS	TOTALS
BP	1	0	0	0	0	452	0	0	0	0	0	453
JS	0	1	0	0	0	236	380	233	0	3	0	853
LB	678	280	90	0	0	977	269	897	2	38	20	3,251
JG	213	556	179	0	0	11	0	0	1	0	0	960
TU	0	0	0	0	0	0	0	0	0	0	0	0
JW	175	291	73	0	0	1	0	4	0	576	0	1,120
DC	0	0	0	0	0	0	0	0	0	0	0	0
SC	0	0	0	0	0	0	0	0	0	0	0	0
JJ	305	468	154	0	0	986	10	482	1	97	37	2,540
TC	2	42	9	0	0	0	0	0	0	0	0	53
ML	468	1,008	262	0	0	150	0	1	2	20	11	1,922
DP	0	0	0	0	0	1	0	0	0	0	0	1
KG	0	0	0	0	0	1	0	0	0	0	0	1
LC	0	0	0	0	0	3	0	0	0	0	0	3
ALL	1,842	2,646	767	0	0	2,818	659	1,617	6	734	68	11,157

To get an idea of how a report like this might be gleaned for information, just take a look. At a glance in the first column, you can see that "JG" was most productive in creating new jobs, while "ML" was considerably more productive in creating appointments outside of initial job creation (just look for the largest numbers as seen in the first two columns, above). "ML" was also big on managing appointment changes. Going on the down line, you can compare productivity in several other areas. "JJ," for example, was the largest actor in managing PartsProcess (special-order parts) activities, and "LB" was just barely behind. In the farthest right "Totals" column, you can readily see that "LB" participated in the greatest quantity of actions overall (at least in terms of what we are managing to measure here).

You may notice there are two groups of listed office persons, with a gap in-between. Basically, those in the first group are pulled from your current-at-the-moment "office-persons-roster" as maintained in your ServiceDesk *Settings* form. Those in the second group involve note entries with other office-person abbreviations (i.e., ones that are no longer found in your current roster).

In introduction on this paper we said we'd "begin" by describing reports as available from directly within the *Reports (F11)* form. We've now described all such reports. At this point, we should segue into describing other reports, as available from within other operational contexts. However, at present those further elements are not yet written.