SAGE ANNUAL SALARY SURVEY 2005-2006

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THE USENIX SIG FOR

[sage]

SYSADMINS

Table of Contents

Introduction

Salary surveys are primary components of the efforts to advance the status of computer system administration as a profession and establish standards of professional excellence. The salary survey also serves individual sysadmins, managers, and HR departments in comparing their practices with those of other companies.

This survey was sponsored by SAGE, a Special Interest Group of the USENIX Association, whose goal is to advance the state of system administration.

The salary survey for the year 2005-2006 was administered during May through August 2006 and garnered 722 valid responses: 681 individuals employed more than half the year and 41 employed less than that. This first part of this document analyzes those employed for more than half the year; the unemployment survey follows on the final pages.

This report includes a large section on demographics, the qualities of the respondents. That is followed by extensive statistical analyses of salaries, distribution, salary increases. Breakdowns include by geography, gender, and experience. The final part of the employment survey includes several pages of respondents' comments on the state of the profession, the future of system administration, and advice to newcomers.

A Note on Nomenclature

As usual, this year's survey generated some contention as respondents wrestled with the term 'system administrator.' In some circles, this is a generic term that covers all those people who care for a computer (security folks, database people, networkers, etc.). In others, it is a carefully delineated area from which many wish to distinguish themselves. This was clear when people began asking if the survey was 'going to be applicable to them.'

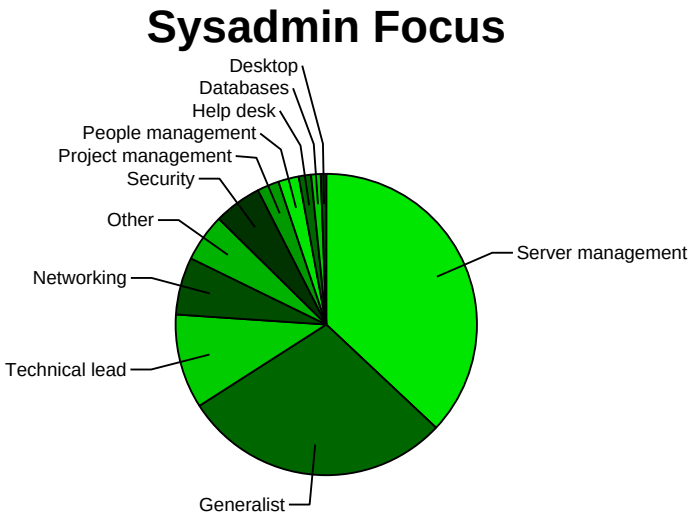
The survey was intended to include all those people who might be lumped into the general field of 'computer support' or 'user support.' Next year we'll try to do a better job of being inclusive while enabling people to distinguish their particular career path (for salary comparison purposes).

Summary

Of the 681 valid respondents, 91.6% were men were women (vs. 2004-2005: 96.2%; 2003: 95.4%; 2002: 93.0%; 2001: 88.4%); 8.4% (57 individuals).

93.8% of the individuals worked 35 or more hours weekly. 6.2% worked less than 35 hours/week. These are the same numbers as respondents reported for 'fulltime' vs. 'part-time.'

The set of respondents broke out into several different types of jobs: Databases, Desktop, Generalist, Help desk, Networking, People Management, Project Management, Security, Server Management, Technical lead, and 'Other.' The chart on the right shows the breakdown of the responses.



Statistical Exclusions

The few respondents who cited salaries greater than US$200,000 are excluded from most of the analyses throughout this document. These salaries significantly impact the calculation of statistical means (averaging in a salary like one million dollars has a big impact on statistics unless you divide it by another huge number) and thus have generally been omitted from reporting. Likewise, the few with annual salaries less than US$10,000 are generally omitted, as they must reflect some compensation scheme outside the mainstream.

After analyzing the data extensively, it became clear that the statistics of interest pertained to the salaries companies were paying, a number that is often more than the amount of money people received (since many people were unemployed for weeks or even months). Accordingly, all reported salaries have been annualized (e.g., a reported US$25,000 for 26 weeks annualizes to US$50,000/year) and, except where mentioned, all salaries have been converted to US dollars when statistical aggregates are used. Salaries are reported in native currencies when appropriate.

In these economically uncertain times, the average of all the salary changes (including the negative ones) for 2005-2006 across full-time work world-wide was 5.43% (2004-2005: 6.12%; 2003: 10.68%; 2002: 8.15%) when calculated for annualized salaries. 507 (24.1%) respondents (2004-2005: 24.1%; 2003: 23.2%; 2002: 24.0%) saw no salary change or had their salary reduced. Of the 83.5% (up from 2004-2005: 75.9%; 2003: 68.8%; 2002: 54.5%) who saw their salaries increase 0.001-30%, the mean increase was 7.4% (down from 2004-2005: 9.15%; down from 2003-2004: 10.95% and 2002: 8.88%).

The mean reported salary for the 487 respondents who reported using US dollars as their currency was $75,612 (vs. 2004-2005: $68,045; 2003: $66,557; 2002: $67,675). For men, the mean salary was $75,667 (vs. 2004-2005: $68,195; 2003-2004: $66,612; 2002: $67,920). For the small sample size of women, the mean was $74,999, approximately the same as men (something not true a few years ago). (2004-2005: $64,016; 2003-2004: $65,432; 2002: $64,946). The overall median was $73,000 (2004-2005: $64,000; 2003-2004: $62,500; 2002: $65,000). The median for women was $74,000, higher than the men (and a big leap up from 2004-2005: $60,500; 2003-2004: $65,000; 2002: $63,000). Please note, these numbers **do not factor in experience** and therefore should not be used as a general comparison of anything. However, because this report endeavors to enable you to find how your salary compares to people who have both similar and different backgrounds, we have included analysis which will enable you to make more accurate comparisons based on experience, education, job title, and SAGE Sysadmin Classification.

We hope you find the following information useful, and we encourage you to participate in next year's survey.

Demographics

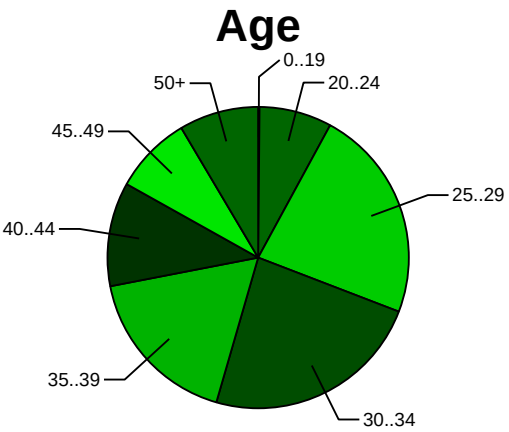
681 individuals completed valid employment surveys this year (plus 247 more who completed the 'unemployment' survey; see the final pages of this document). They completed a comprehensive questionnaire on the World Wide Web with over 80 questions, including:

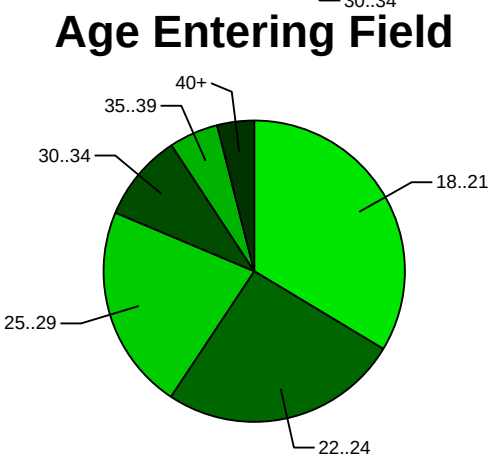
- Age
- Benefits
- Certifications
- Commute time
- Corporate policies
- Education
- Employers
- Experience
- Focus
- Gender
- Home Internet
- Hours worked
- Hours training
- Industry
- Job type
- Length of employment
- Location
- Pager/cell phone requirements
- Professional organizations
- Purchasing responsibilities
- SAGE admin level
- Salary & bonuses
- Supervisory duties
- Technical associations
- Telecommuting
- Time off
- Title
- Travel

Age and Experience

It has been said that system administration is a young person's game. The pie chart on the right shows the concentration of admins in various age groups. Only 30.8% (vs. 2004-2005: 45.2%) of the respondents were under 30 years of age; just 28.0% (vs. 2004- 2005: 15.0%) were 40 years of age or older. As the field matures, it's clear that admins are covering the entire age spectrum ever more fully.

The table below compares experience and age. Over 18.6% of respondents (vs. 2004-2005: 12.2%) entered the field at age 30 or later. This chart has its columns normalized to 100% for easy comparison. Percentages are of 681 valid geographical regions.





Age vs. Years Experience

Age	0..3	4..5	6..9	10..15	16..20	21+	Total
0..24	42.5%	19.5%	3.5%	0.0%	0.0%	0.0%	7.9%
25..29	46.6%	45.1%	37.8%	4.1%	0.0%	0.0%	22.9%
30..34	6.8%	15.9%	32.8%	35.5%	0.0%	0.0%	23.6%
35..39	2.7%	8.5%	13.9%	30.0%	22.9%	2.6%	17.5%
40..44	1.4%	4.9%	5.5%	14.7%	35.7%	7.9%	11.2%
45..49	0.0%	3.7%	3.0%	10.6%	20.0%	28.9%	8.4%
50+	0.0%	2.4%	3.5%	5.1%	21.4%	60.5%	8.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Subtracting years of experience in the field of system administration from the respondent's age can lead to a rough approximation of the age they entered the field (though obviously some respondents might have been sysadmins for a while then changed careers and later changed back). The lower of the two charts above shows the results of such an estimation.

Geographies Represented

Respondents were located throughout the world, though only the USA and potentially Canada had enough data for true statistical validity of any results. Only the USA's San Francisco Bay Area had more than 50 respondents.

A number in square brackets (e.g., [3]) denotes an absolute number of respondents that is less than one percent of the total of those who named a country.

Sysadmins Around the World

Country	% Resp	Country	% Resp	Country	% Resp
United States	75.0%	Belgium	[2]	Iceland	[1]
Canada	8.1%	Denmark	[2]	Indonesia	[1]
UK	2.5%	France	[2]	Japan	[1]
Australia	1.5%	Greece	[2]	Kazakhstan	[1]
Germany	1.2%	Israel	[2]	Malta	[1]
India	1.2%	Italy	[2]	Pakistan	[1]
Finland	1.0%	Mexico	[2]	Poland	[1]
Argentina	[4]	Norway	[2]	Portugal	[1]
Ireland	[4]	Romania	[2]	Russia	[1]
Netherlands	[4]	Spain	[2]	Slovakia	[1]
Brazil	[3]	Albania	[1]	South Africa	[1]
Malaysia	[3]	Austria	[1]	Uganda	[1]
New Zealand	[3]	Belarus	[1]	Ukraine	[1]
Sweden	[3]	China	[1]		
Switzerland	[3]	Hungary	[1]		

Titles

Respondents were asked to share their position's title (i.e., as shown on their business card). 681 actual titles contained 228 (vs. 2004-2005: 400; 2003: 437; 2002: 688) distinct words. The average actual title was 23.5 characters (vs. 2004-2005: 21.8; 2003: 21.6) long with 2.81 words (vs. 2004-2005: 2.62; 2003: 2.74; 2002: 3.72). 4.1% (2004-2005: 3.3%; 2003: 4.7%) of the titles had multiple functions separated by a slash; only two had more than one slash.

Title Words

Freq.	Word	Freq.	Word	Freq.	Word
44.2%	System (etc.)	4.1%	Specialist	2.0%	Technology
36.9%	Administrator (etc.)	3.5%	Technical	1.6%	Linux
12.3%	Senior	3.1%	Security	1.6%	II
10.4%	Engineer	3.0%	Programmer	1.5%	Software
9.9%	UNIX	2.5%	Support	1.2%	Technician
8.9%	Manager	2.4%	Operations	1.2%	Services
8.2%	Network	2.3%	Information	1.2%	III
4.3%	Analyst	2.3%	Consultant	1.2%	Director
4.2%	IT	2.3%	Computer	1.1%	Principal
4.1%	Senior	2.2%	Lead		

This year's most popular word was again 'system' (in incarnations that included 'systems' and 'sys'), appearing in 44.2% of the titles (vs. 2004-2005: 41.7%; 2003: 40.1%) of the titles. This year's runner-up was, again, 'administrator' with 36.9% of the titles (vs. 2004-2005: 35.6%; 2003: 34.5%). The number of titles containing the word 'UNIX' (9.9%) is way up from 2004-2005: 7.2%.

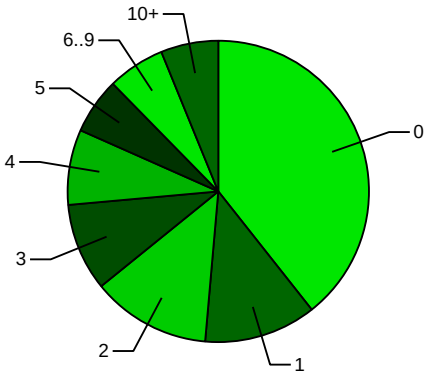
A few years ago, the word 'administrator' carried the connotation of secretary. It appears that infrastructure support employees are now using the word with high frequency.

The table above on the right shows all the words that appeared in 25 or more titles.

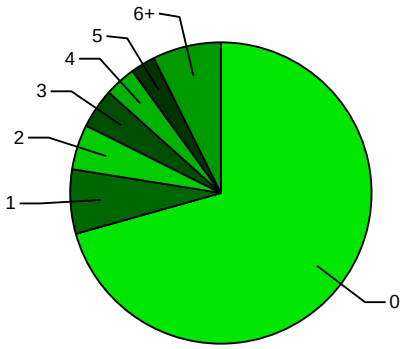
Supervisory Capacity

About 60% of the respondents reported informal supervisory capacity at some level; over a quarter (29.4%) had formal supervisory capacity. These charts hint at the level of mentoring in the profession.

Informal Subordinates



Formal Subordinates



Purchasing Responsibility

Only a tenth of respondents have no spending/purchasing responsibility. The charts below and on the next page show purchasing responsibilities for all the sub-disciplines. Not surprisingly, a different focus brings different responsibilities.

	Generalist				Help desk			
Purch. Resp.	None	Contrib	Specify	Final	None	Contrib	Specify	Final
Items less than US$500	11.7%	8.1%	38.6%	41.6%	55.6%	11.1%	11.1%	22.2%
Items US$500-US$5000	11.7%	13.2%	57.4%	17.8%	55.6%	11.1%	33.3%	0.0%
Items more than US$5000	13.7%	27.9%	50.3%	8.1%	55.6%	33.3%	11.1%	0.0%
Budget for working group	30.5%	39.1%	20.8%	9.6%	55.6%	44.4%	0.0%	0.0%
Budget for IT/Comp dept.	38.1%	35.5%	17.8%	8.6%	55.6%	44.4%	0.0%	0.0%

	Security				Networking			
Purch. Resp.	None	Contrib	Specify	Final	None	Contrib	Specify	Final
Items less than US$500	11.4%	11.4%	54.3%	22.9%	11.9%	9.5%	52.4%	26.2%
Items US$500-US$5000	14.3%	20.0%	60.0%	5.7%	14.3%	16.7%	47.6%	21.4%
Items more than US$5000	20.0%	31.4%	45.7%	2.9%	19.0%	19.0%	50.0%	11.9%
Budget for working group	34.3%	37.1%	25.7%	2.9%	31.0%	31.0%	28.6%	9.5%
Budget for IT/Comp dept.	57.1%	34.3%	8.6%	0.0%	38.1%	33.3%	21.4%	7.1%

	Server management				Databases			
Purch. Resp.	None	Contrib	Specify	Final	None	Contrib	Specify	Final
Items less than US$500	18.7%	13.9%	38.1%	29.4%	0.0%	14.3%	57.1%	28.6%
Items US$500-US$5000	20.6%	16.7%	52.4%	10.3%	14.3%	28.6%	42.9%	14.3%
Items more than US$5000	21.8%	26.2%	46.8%	5.2%	28.6%	28.6%	28.6%	14.3%
Budget for working group	42.5%	35.3%	19.0%	3.2%	85.7%	14.3%	0.0%	0.0%
Budget for IT/Comp dept.	53.2%	30.2%	14.7%	2.0%	85.7%	0.0%	14.3%	0.0%

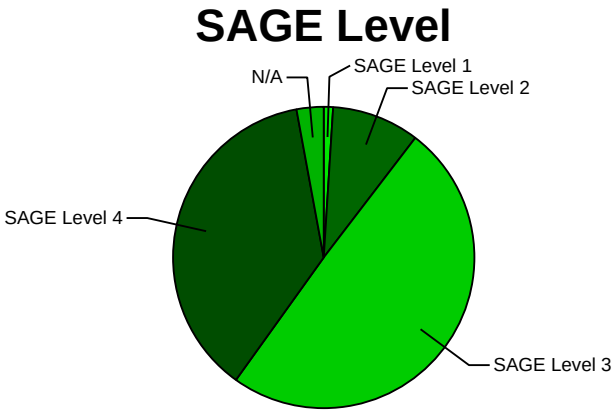
	People management				Technical lead			
Purch. Resp.	None	Contrib	Specify	Final	None	Contrib	Specify	Final
Items less than US$500	13.3%	0.0%	20.0%	66.7%	8.7%	8.7%	47.8%	34.8%
Items US$500-US$5000	0.0%	0.0%	26.7%	73.3%	7.2%	11.6%	58.0%	23.2%
Items more than US$5000	0.0%	0.0%	73.3%	26.7%	4.3%	23.2%	63.8%	8.7%
Budget for working group	0.0%	6.7%	60.0%	33.3%	14.5%	47.8%	27.5%	10.1%
Budget for IT/Comp dept.	0.0%	60.0%	26.7%	13.3%	26.1%	47.8%	23.2%	2.9%

	Project management				Desktop			
Purch. Resp.	None	Contrib	Specify	Final	None	Contrib	Specify	Final
Items less than US$500	12.5%	6.2%	37.5%	43.8%	25.0%	50.0%	25.0%	0.0%
Items US$500-US$5000	12.5%	6.2%	56.2%	25.0%	25.0%	75.0%	0.0%	0.0%
Items more than US$5000	12.5%	18.8%	56.2%	12.5%	25.0%	75.0%	0.0%	0.0%
Budget for working group	6.2%	56.2%	25.0%	12.5%	75.0%	25.0%	0.0%	0.0%
Budget for IT/Comp dept.	25.0%	37.5%	25.0%	12.5%	100.0%	0.0%	0.0%	0.0%

	Other			
Purch. Resp.	None	Contrib	Specify	Final
Items less than US$500	20.0%	11.4%	34.3%	34.3%
Items US$500-US$5000	25.7%	14.3%	42.9%	17.1%
Items more than US$5000	28.6%	25.7%	37.1%	8.6%
Budget for working group	45.7%	25.7%	11.4%	17.1%
Budget for IT/Comp dept.	57.1%	17.1%	14.3%	11.4%

SAGE Sysadmin Classifications

Respondents were asked to self-assess the responsibilities of their primary job in order to show the mappings with the SAGE job levels. Only 2.9% of them felt their job did not fit within the proper parameters. The remainder classified themselves according to these definitions. The number of SAGE Level 1 respondents was very low.



SAGE Level 1: Assist on consulting or engineering projects or the administration of a systems facility. Perform routine tasks under the direct supervision of a more experienced system administrator or consultant. May act as a front-line interface to users and senior system administrators.

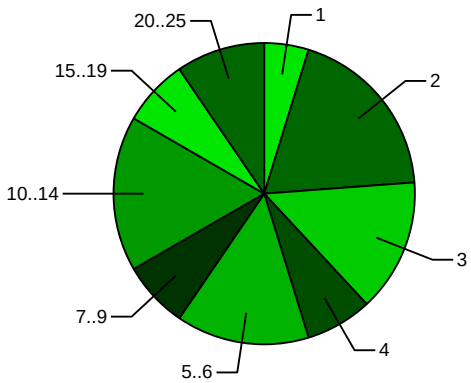
SAGE Level 2: Assist on consulting or engineering projects or the administration of a systems facility. Work under general supervision of a computer system manager or senior consultant. Carry out more complex tasks with some independence and discretion regarding how to carry out the tasks.

SAGE Level 3: Receive general instructions for assignments from manager and work with independence and discretion regarding how to carry out tasks. Initiate some new responsibilities and help to plan for the future of a facility. Manage the work of junior system administrators, operators, engineers, or consultants. Evaluate and/or recommend purchases and have a strong influence on the purchasing process.

SAGE Level 4: Design and manage the computing infrastructure or manage the larger, more complex consulting or engineering projects. Work under general direction from senior management. Establish or recommend policies on system use and services. Provide technical lead and/or supervise system administrators, system programmers, engineers, consultants, or others of equivalent seniority. Have purchasing authority and responsibility for purchase decisions and budget.

Unemployment

8.4% (vs. 2004-2005: 11.2%; 2003: 10.9%) of the respondents who were generally employed during the last year were unemployed for at least one week during the survey period. Of those, 45.2% (vs. 2004-2005: 4.5%; 2003: 3.3%) were unemployed for four weeks or less; only 16.6% were unemployed for 15 weeks or more.



Certifications

Respondents named the certifications most important to them; see the table below for the results. Only two-thirds had certificates at all. The 'college degree' is now listed as the most valuable certificate for this crowd. Of the industry certificates, only Red Hat rose to the 10% level.

Certifications Held

Certification	% Resp.	Certification	% Resp.	Certification	% Resp.
I have no certs	33.8	Sun/Solaris SCN*	3.8	SANS/GIAC GSEC	1.8
Bachelor's Degree (any relevant)	15.9	(ICS)2 CISSP	3.4	Novell CNA	1.6
Red Hat (any)	10.0	Sun/Solaris Other	3.4	CSage	1.5
Cisco CCNA	8.2	Microsoft Other	3.1	SANS/GIAC GCIA	1.2
Microsoft MCP/MCP+i	7.5	AIX (any)	3.1	Cisco Other	1.0
Sun/Solaris SCSA	7.2	HP (any)	2.8	Novell CNE	1.0
None of my certs is important to my work	7.0	IBM (any)	2.6	COMPTIA Linux+	1.0
Microsoft MCS*	5.6	COMPTIA N+	2.2	EMC (any)	1.0
COMPTIA A+	4.4	LPI (any)	1.9	Oracle/OCP (any)	1.0
Brainbench (any)	4.1	Cisco CCNP	1.8	Learning Tree (any)	1.0

A number in square brackets (e.g., [3]) denotes an absolute number of respondents that is less than one percent of the total.

Certifications often generate a lot of discussion when syadmins gather. This year's survey asked respondents their general opinion about the value of certifications. The results are illuminating, given that the most vocal opinion is ''they are worthless.'' In this survey, only a quarter of the respondents seem to agree at any level with the gross generalization of worthlessness.

Value of Certs

Perceived value	% Resp.
Sometimes, it depends on the certification	52.6%
Rarely, a few are good	20.3%
Yes, generally they are a good thing	10.9%
Usually, most are pretty good	8.4%
No, generally they are worthless	5.7%
No opinion	2.2%

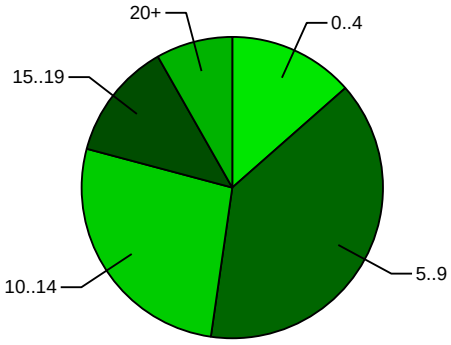
Experience

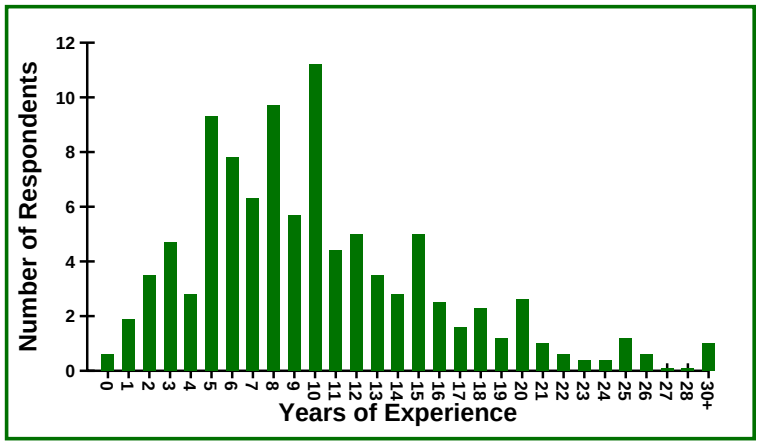
Respondents had a mean of 10.08 (2004-2005: 7.91; 2003: 8.01; 2002: 7.83) years of experience, with a standard deviation of 5.84 years (almost the same as the three previous years). The median was 9 years, up two years since 2004-2005, 2003, and 2002). About 48% had ten years or more of experience; 20.9% had 15 or more years of experience (2004-2005: 11.8%; 2003: 11.8%; 11.7% in 2002). Two charts summarize the experience levels of the respondents. The pie chart shows a large (38%) hump in the distribution for those with 5..9 years experience, though not as large as previous years. About 13.5% have less than five years of experience.

The detail graph shows an almost bell curve-like distribution with one peak at ten years. Curiously, the last three years' charts all had a peak at five years. It has moved a bit since then. The detailed graph implies that a number of people entered the field 5-10 years ago, and that the number entering or staying in the field is now declining (though the sample size and self-selection probably prohibit drawing any conclusions). This has been a consistent trend, though.

In past years, the gender chart (shown below on the right) implied (more strongly than this one does) that women stay in the field longer than men. Only the data for 15..19 years supports this notion with any strength these days. No conclusions are possible, though, since the sample size for women is so very small.

Years of Experience





Exp. vs. Gender

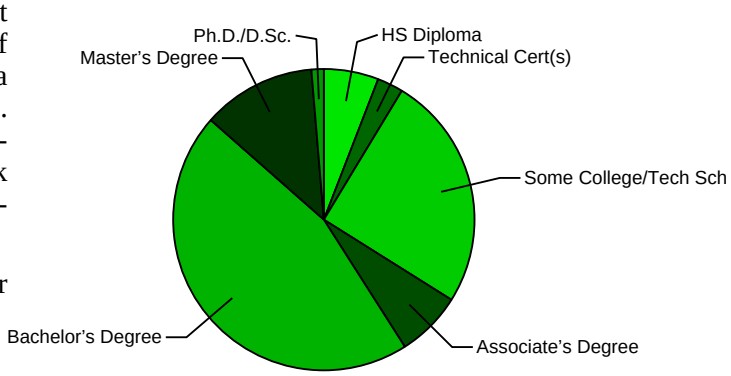
Exp.	Female	Male	Total
0	0.0%	0.6%	0.6%
1..4	15.8%	12.7%	12.9%
5..9	40.4%	38.6%	38.8%
10..14	19.3%	27.6%	26.9%
15..19	17.5%	12.2%	12.6%
20..24	3.5%	5.3%	5.1%
25..29	3.5%	1.9%	2.1%
30+	0.0%	1.1%	1.0%
Total	100.0%	100.0%	100.0%

Education

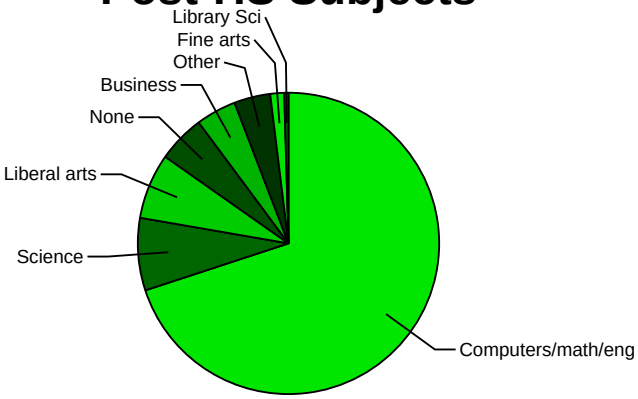
Experience is often backed by education. About 59.0% (vs. 2004-2005: 53.3%; 2003: 57.6%) of those responding have a college degree (at least a Bachelor's) in any field (see the chart on the right). Informal discussions at conferences yield the unsurprising results that those admins with degrees think college education is a real boon while the others argue, ''I get along just fine without one.''

The chart below shows the breakdown of subjects for post-secondary education.

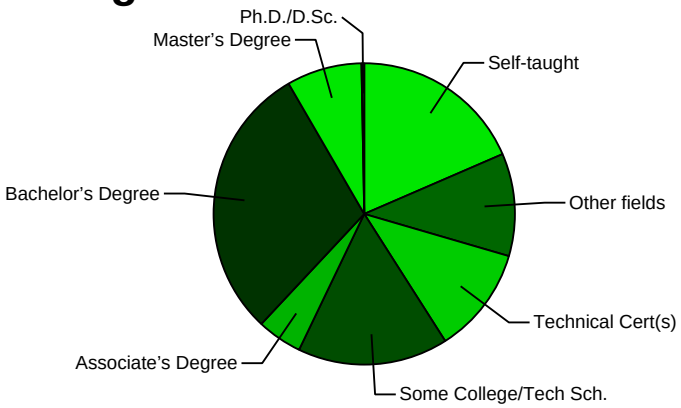
Highest Educ. Achievement



Post-HS Subjects



Highest Relevant Education



Some college degrees are arguably more relevant (in the technical sense) to computer administration. The second chart above on the right takes this into account and shows the highest 'relevant' degree (according to the respondent's definition of 'relevant'). Fully 38.0% (vs. 2004-2005: 37.5%) of those surveyed have earned at least a Bachelor's degree in a relevant field.

Most universities don't really teach system administration. How do people *really* learn system administration? Over 85% of them were able to attribute much of their knowledge to on-the-job training and/or self-instruction.

Learning Styles

	Not at all	A bit	Somewhat	A lot
Taught myself (textbooks, web, practice, etc.)	1.3%	2.5%	10.0%	86.2%
On the job	1.0%	1.6%	11.9%	85.5%
Mentor of any kind	25.3%	25.3%	32.7%	16.7%
University/college education (CS/IS/IT degree program)	39.6%	28.2%	21.1%	11.0%
Vendor-specific training courses	36.9%	36.4%	20.6%	6.2%
Conferences/commercial training	35.5%	37.9%	22.2%	4.4%
Certification program courses	51.2%	27.9%	17.2%	3.7%
Non-degree tech school, college, or university courses	73.9%	15.1%	8.5%	2.5%
Military	94.4%	1.6%	1.6%	2.3%
Other	99.4%	0.3%	0.0%	0.3%

Relevant Education vs. Age

The Relevant Education chart is the rare chart that is probably better read starting at the bottom and moving up. In the past, the bottom three rows (finished college degrees in a relevant field) showed that only the younger members of the profession are indeed getting relevant education. Of course, this correlated with the availability of such education − the first Bachelor's degree in computer science was given around 1974, so some of the 50+ group never had a chance. Nowadays, though, the number of admins with relevant university education ranges from 31.5% to 41.3%, with not a lot of variance across the age groups. Plenty of admins have Associate's degrees now, too.

Relevant Education vs. Age

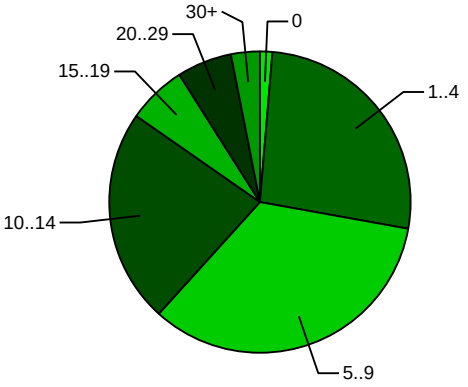
Education	1..24	25..29	30..39	40..49	50+	Total
Self-taught	20.4%	23.7%	19.3%	11.3%	15.5%	18.5%
Other fields	7.4%	4.5%	11.1%	16.5%	19.0%	11.0%
Technical Cert(s)	13.0%	14.7%	10.0%	10.5%	10.3%	11.5%
Some College/Tech Sch.	18.5%	14.1%	17.5%	16.5%	12.1%	16.2%
Associate's Degree	9.3%	1.9%	5.7%	3.8%	6.9%	4.8%
Bachelor's Degree	29.6%	35.3%	28.2%	30.8%	19.0%	29.7%
Master's Degree	1.9%	5.8%	7.5%	10.5%	17.2%	8.1%
Ph.D./D.Sc.	0.0%	0.0%	0.7%	0.0%	0.0%	0.3%

Continuing Education

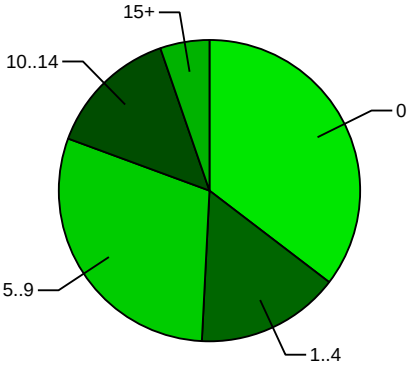
In the world of computer administration, learning and growing are absolute requirements. Admins must keep up to date on a host of new technical and legal developments in their focus area and in 'soft' areas, as well. The weekly expenditure of time for keeping up is quite dramatic (see the first chart on the right). The average is 8.7 hours/week (vs. 2004-2005: 9.2; 2003: 8.9; 2002: 9.0) and the standard deviation is 8.8 hours/week (higher than previously). This works out almost to a quarter-time job for '40 hour' workers. Only 28% report four hours or less per week; more than 38% report a staggering 10 hours or more per week. Just 1.3% reported 0 hours/week. It is clear that continued learning is de rigueur for this profession.

Organizations sometimes pay for employee continuing education. Of 681 respondents, 64.6% (up from 2004-2005: 58.9%; 2003: 60.3%) were afforded this option. This might signal a growing recognition of the value of training by institutions. Even with that many zeroes averaged in, the mean number of training days annually was 4.6 (vs. 2004-2005: 4.8; 2003: 4.4) and the median was 4 (2004-2005: 3; 2003: 3). See the chart on the right for the breakdown.

Hrs/wk Self-training



Paid Training Days



Industries Represented

Roughly 84.0% (2004-2005: 83.2%; 2003: 82.7%) of the respondents work at a single job; 16.0% have multiple employers. Respondents were asked to cite their primary area of employment. Education led the way again; for some reason they come out in force for this survey every year. Almost 97% were able to categorize their employment into a set of canonic industries.

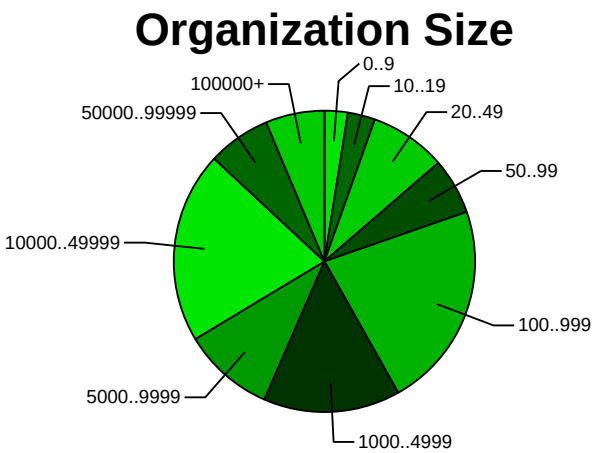
Employment Categories

Industry	%	Industry	%	Industry	%	Industry	%
Education - College or University	19.4%	Other, please specify briefly	3.1%	Computer hardware/semiconductor	1.9%	Publishing	1.6%
Telecommunications	6.6%	IT Company: Consulting	2.9%	IT Company: Web development/webmaster	1.9%	Insurance/risk management	1.3%
Financial services (all kinds)	6.3%	Health Care, Medicine	2.8%	Engineering	1.9%	Consulting and Business Services	1.3%
IT Company: Software Development	6.2%	Manufacturing	2.8%	Not-for-profit	1.8%	Retail	1.3%
IT Company: ISP/ASP	5.1%	Government - Contracting	2.3%	Entertainment	1.8%	Education - Elementary or Secondary	1.2%
Government - Non-Military	3.5%	Defense	2.1%	Advertising, Public Relations, Communication, or Marketing	1.6%	State or Local Government	1.2%
IT Company: Other	3.2%	Research	2.1%	Aeronautical/aerospace	1.6%		

Other industries (with less than 1% of the respondents) included: Government − Military [6], IT Company: Security [6], Utility [5], Construction [5], Legal [5], Transportation [4], Wholesale [4], Automotive [4], Gambling/gaming/lottery [4], Hospitality [3], Broadcasting/Cable/Video [3], Energy Production or Mining (oil, coal, etc.) [3], Services (other) [3], Travel/Recreation [2], Biotechnology [2], Distribution/Warehousing [2], Library [2], Environmental Services [2], GIS/cartography/mapping [2], Accounting [1], Agriculture [1], Architecture (buildings) [1], Human resources/human capital/recruiter [1], Intellectual property [1], Education - Commercial, training, etc. [1], Pharmaceuticals [1], Food [1], Real Estate [1].

Organization Size

58.1% of respondents work in organizations with at least 1,000 people. One might expect this percentage to be even higher, since such organizations employ the vast majority of admins. 19.7% work in organizations with fewer than 100 employees.



Travel

Only 45% (vs. 2004-2005: 53.3%; 2003: 55.4%; 2002: 53.7%) of the respondents travel at all for their company (excluding conferences and training). Note the recent reduction. About 14% travel more than two weeks per year. The pie chart on the right is a graphical representation of this data.

Work Week Characterization

Sysadmins have perpetually complained about long work weeks. The survey asked how many hours per week each respondent worked. The graph on the right tells the tale (for those who worked 30 or more hours per week). About half (48.8%) reported 44 or fewer hours per week; about half reported 45 or more. Those reporting 60 hours or more numbered 5.3% (2004-2005: 10.1%; 2003: 9.3%). The reduction here might be real or might be a more realistic approach to counting work hours.

For full-timers, the average work week was 44.7 hours/week (down from 2004-2005: 45.6; 2003: 45.7; 2002: 46.7; 2001: 47.7). This is still more like nine hours per day instead of the the mythical ‘‘USA average eight hour day’’ (but it’s getting closer). About 22.5% (2004-2005: 32.6%; 2002: 27.8%) of the respondents − almost one in three − worked more than 50 hours/week (10 hours/day for a standard five-day work week).

Commute Time

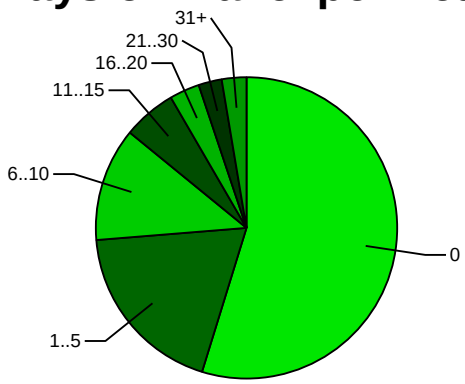
While over 10.6% of respondents commute (one way) for less than 10 minutes, 26.7 (2004-2005: 22.1%) commute more than 45 minutes, including 3.5% (2004-2005: 2.9%) at over 90 minutes. See the pie chart on the right for a summary.

Working from Home

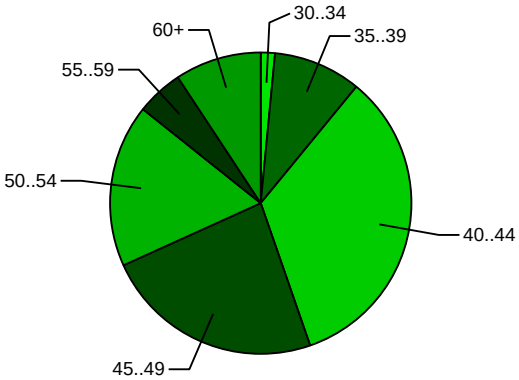
Telecommuting is a big buzzword in the technical community. The chart below on the right illuminates interesting facts:

- 96.5% of respondents have Internet at home
- 92.8% (2004-2005: 93.6%; 2003: 88.9%; 2002: 75%) of respondents have full-time Internet at home
- Companies do assist in paying for connection costs: 32.3% pay something or everything (vs 2004-2005: 26.7%); 45.1% (presumably those whose employers are not paying) are dissatisfied with this
- Over a third − 40.2% (2004-2005: 39.8%; 2003: 38.5%) − telecommute for more than 8 hours/week
- About 5.7% (2004-2005: 7%) telecommute more than 30 hours/week
- 94.9% (2004-2005: 95.5%; 2003: 89.7%) connect to the Internet at speeds greater than 1 megabit per second (predominantly via DSL or cable modems)

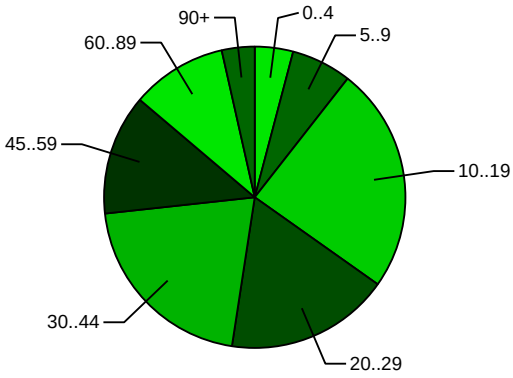
Days of Travel per Year



Hours per Week



Commute Time



Internet at Home

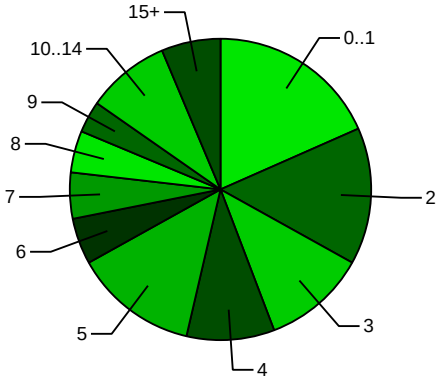
Query	No	Yes
Internet connection at home?	3.5%	96.5%
Full-time connection?	7.2%	92.8%
Company pays ANY connection costs?	67.7%	32.3%
company pays ALL connection costs?	77.1%	22.9%
Satisfied with employer financial support?	45.1%	54.9%
Primary employer work >8 hours/week at home?	59.8%	40.2%
Primary employer work >30 hours/week at home?	94.3%	5.7%

Longevity and Loyalty

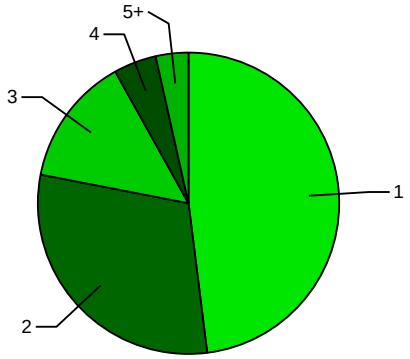
Recent economic conditions have dramatically changed notions of employer (and employee) loyalty and position longevity in many cultures. The mean job stay of those at their job at least a few months is 5.46 years (2004-2005: 4.14 years; 2003: 4.22; 2002: 4.32 years); the median is four years. 53.6% (2004-2005: 53.1%; 2003: 54%) have been at their job for less than four years. Only 28.1% (2004-2005: 13.7%; 2003: 15.7%; 2002: 15.1%; 2001: 18.4%) of those who responded say they have been with their current employer for seven years or more.

Looked at another way, it's clear that these days admins continue to move around to different jobs (for a number of reasons). On the far right is a chart that reveals the number of primary employers respondents report having had over the previous five years. Note that 48.0% (2004-2005: 41.4%; 2003: 38.6%) have stayed with the same employer for the full half-decade. It seems that folks are not job hopping nearly so much as during the 'boom.'

Years on This Job



Empl's Last Five Yrs



As far as loyalty goes, the survey asked what would make people wish to change jobs (they could check several items). Intriguingly, compensation is #1 on the list of respondents, almost twice as high as second place. Job satisfaction has a huge number of components that include (from former computer company executive Bill Wallace):

- A sense of personal power; mastery over others
- Ego-gratification − a feeling of price or importance
- Financial success
- Recognition of success; reassurance of worth
- Social or group approval; acceptance of peers
- The desire to win; need to be first
- A sense of roots
- Opportunity for creative expression
- Accomplishment of something worthwhile
- New experiences
- Liberty, freedom, privacy from intrusion
- A sense of self-esteem, dignity, and self-respect
- Love in all forms
- Emotional security

Ten years ago, compensation did not so frequently come out #1 on the list.

Reasons to Change Jobs

Why	% Resp.	Why	% Resp.
Pay/compensation	59.3	Telecommuting	12.0
Challenge/interest	34.2	Ethics	11.3
Benefits	25.1	Workload	11.3
Location/commuting issues	25.0	Ability to work with/contribute to open source projects	11.0
Job security	24.1	Family-friendly	8.1
People (friendlier, more competent, etc.)	23.6	Physical environment (e.g., offices vs. cubicles)	8.1
Hours/schedules (good/bad)	22.6	Dress code	7.6
Ability to advance/be promoted more quickly	22.2	Company size	7.6
Culture	20.9	On-call/pager/cell issues	6.9
Management/vision	18.6	Conference attendance	5.1
Training, learning, tuition reimbursement, certification programs	16.9	Travel issues (want more or want less)	4.1
New technology	16.7	Project management	3.5
Reputation, size, potential, stability, or mission	15.1	Intellectual property policy	2.2
Respect	14.1	Other (please specify)	1.5
Vacation time	14.0	Visa/work permit	1.3
Ability to work with/avoid a given brand or vendor	13.8	Child care	1.2
Competence	13.4		

As to longevity expectations, 84.1% (2004-2005: 79.9%; 2003: 80.6%, 2002: 79.4%; 2001: 75.8%) of respondents report that they expect to be in system administration in five years. The other 15.9% answered 'No.' The table below shows the differences in expectations for members of various sized organizations. Those in the smallest companies (with 0..9 employees) tended to be less confident of their future in computer administration; the rest seem fairly certain of their future (with the slight dip for those in the largest companies).

Future Prospects vs. Company Size

Stay?	0..9	10..49	50..99	100..499	500..999	1000..4999	5000+	Total
Go elsewhere	29.4%	13.2%	9.8%	11.4%	8.7%	13.0%	20.3%	15.9%
Stay in field	70.6%	86.8%	90.2%	88.6%	91.3%	87.0%	79.7%	84.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

For those who would change away from the profession, what future career areas are they considering? 113 respondents answered the question, ''What else would you do?'' with some answer that wasn't ''Stay in the field.'' See the table on the right for details.

Future Prospects

% Resp.	Field	% Resp.	Field
3.3	Management	[7]	Retire
2.2	Development	[6]	Project Management
1.2	Security		

Organization Membership

Professionally 41.3% of respondents belong to SAGE; 35.1% belong to USENIX; 23.5% belong to some local group; 9.4% belong to ACM; and 7.5% belong to IEEE. The table on the right below shows not only membership but opinions on 'helpfulness' for the total set of respondents. Respondents could check one box for each organization so 'Belong & Helpful' means not only do they belong but also they think the organization is helpful. SAGE & USENIX came out on top this year − 28.7% say SAGE is helpful or very helpful.

A few other organizations garnered significant mention for this query: LOPSA (5.4% were members), ISSA (6 respondents were members), and ISC2 (6 respondents were members).

Technical Assns. and Rated Utility

Organization	Do not belong	Belong	Belong & helpful	Belong & very helpful
SAGE	58.7%	12.5%	21.1%	7.6%
USENIX	64.9%	12.6%	17.2%	5.3%
A local computer/ OS/user group	76.5%	8.2%	10.7%	4.6%
IEEE	92.5%	3.8%	2.8%	0.9%
ACM	90.6%	5.9%	3.1%	0.4%

Traditional Time Off

Like most professionals, system administrators usually get some paid vacation (in addition to paid holidays). While 3.2% of those reporting say they get no paid vacation, the mean of those who do is about 16.8 days (not counting those who report more than 30 annual days off). The median is 15 days. While experience in the field can yield increased vacation days, staying with a single employer longer can yield even greater vacation (see the charts below).

Respondents had a mean of 8.7 paid holidays/year, with 6.4% reporting no paid holidays at all.

Note that some cultures have much longer vacation than those in the USA; this accounts for some of the higher numbers on the right.

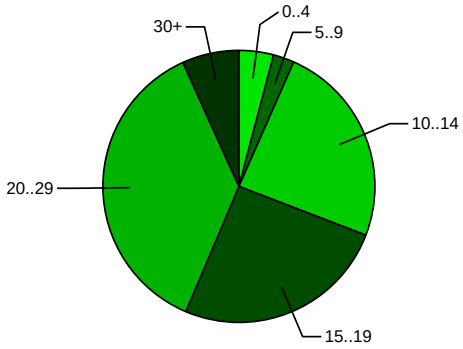
Exper. vs. Days Off

Years Experience	Days Vac.	Years Experience	Days Vac.
0	11.2	6	16.7
1	16.6	7..9	17.7
2	17.4	10..14	18.2
3	15.6	15..19	17.0
4	17.6	20+	20.4
5	14.9		

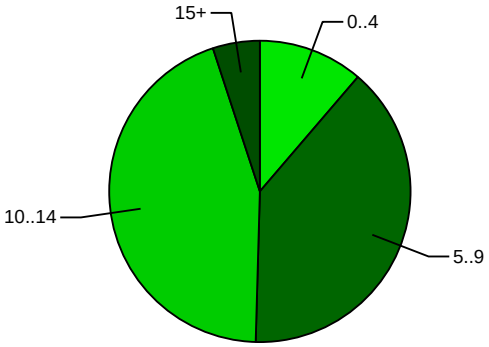
Longevity and Vacation

Years at Employer	Days Vacation	Years at Employer	Days Vacation
0	15.8	6	18.2
1	14.5	7..9	19.5
2	15.5	10..14	20.2
3	16.7	15..19	22.3
4	17.9	20+	20.8
5	17.5		

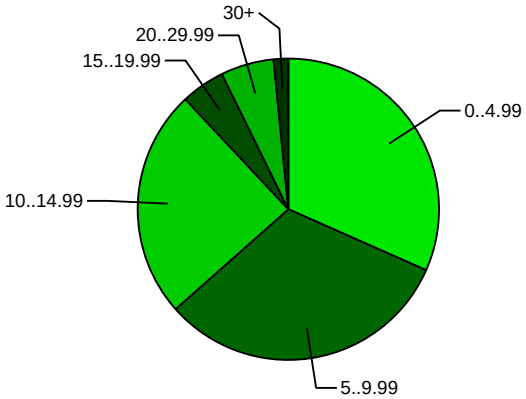
Annual Days Paid Vacation



Paid Holidays



Annual Sick Leave



Sick days are another kind of time off work. Of those responding, 14.5% (2004-2005: 16.4%; 2003: 12.7%; 2002: 12.1%) receive (or took) no sick days. The mean was 7.5 (2004-2005: 6.9; 2003: 7.4; 2002: 7.1); the median was 6 days (2004-2005: 6; 2003: 6; 2002: 5). Above on the right is a chart of sick day allocation (for those who have limits).

Benefits

The chart on the right describes insurance coverage for the survey's respondents. Note that those in Europe often get this coverage from their government and not from their employer.

About 78.9% (2004-2005: 73.1%; 2003: 75.2%) of respondents report that their employer contributes to a retirement fund on their behalf. Respondents also reported on receiving other extra benefits.

Insurance Coverage

Coverage	Not offered or not used	Unpaid	Partly paid	Fully paid
Disability insurance	22.5%	9.5%	39.8%	28.2%
Life insurance	21.9%	9.1%	41.6%	27.5%
Health insurance	11.5%	3.2%	59.6%	25.7%
Dental insurance	15.4%	6.6%	56.4%	21.6%
Vision care insurance	25.4%	8.8%	47.4%	18.4%

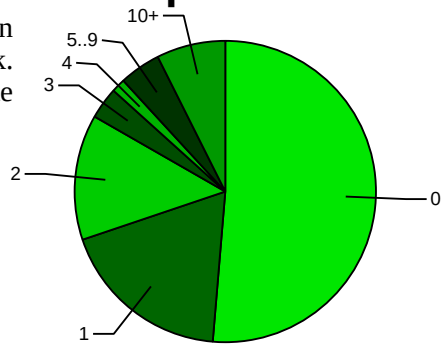
Benefits Reported

Benefit	% Resp.	Benefit	% Resp.
401(k) matching (i.e., company adds money to pension/retirement fund)	44.8	Credit union	17.3
Family medical insurance	43.3	Hardware or telecomm assistance, discounts for home	17.2
Tuition support; certification cost support	42.4	Domestic partnership benefits	15.6
401(k) (or other pension/retirement fund)	38.9	Donation matching	14.5
Cell phone (paid)	38.8	403(b)	13.1
Food/drink at work	31.3	Performance or signing bonus	11.9
Flextime/flexible hours (e.g., 9 x 80, 4/40 schedules)	30.7	Profit sharing	11.2
Conference attendance (including tutorials)	29.7	Commuting assistance	11.0
Retirement plan/fund/program	27.3	Association memberships	10.1
Discounts of various kinds	26.9	Child care/childcare assistance	7.0
Parking	23.5	Housing/home loan	3.4
Gym, health club membership	23.2	Special pensions	2.3
Telecommuting	21.9	RRSP (matching, assistance)	2.1
Stock options or stock purchase plan	19.1	Company car (or lease)	1.9
Flexible/cafeteria plan for benefits	18.2	Other	1.9
Employee stock ownership plan	17.8	IRA	1.6

Hiring Outlook

Respondents were asked to estimate the number of sysadmins to be hired in the upcoming year. The chart on the right summarizes this optimistic outlook. Almost half (48.7%) anticipate hiring at least one person. Over 7% anticipate hiring ten or more.

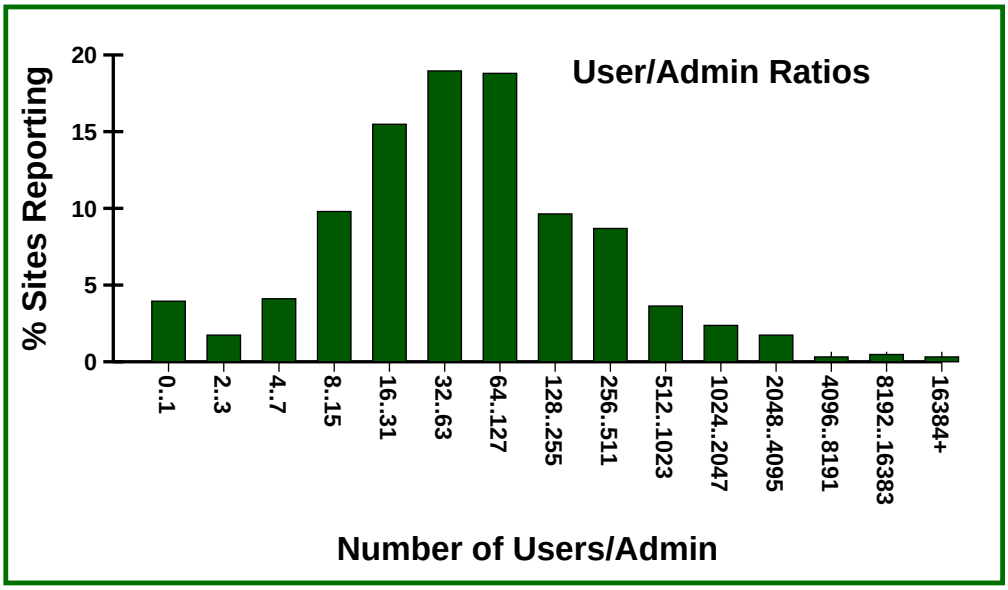
Anticipated Hires



Users per Admin

Managers often look to SAGE for a ‘‘universal constant’’ that is the number of full-time-equivalent users that a single administrator can manage. This year’s survey again collected data from which to estimate this elusive value. The answer is, ‘‘it depends.’’ A site with resource-intensive users might require far more admins than, for example, eBay, which has a huge number of users but a smaller admin ratio, since the users are generally exploiting a single application.

As reported in previous surveys, the breakdown shows a bell-shaped distribution when plotted against a logarithmic scale for the number of users; see the chart below.



Some notes on this chart:

- A small number of respondents appears to have responded with unusual and probably erroneous numbers (e.g., 40,000 admins for 40,000 users). Thus, take the left-hand bars with a grain of salt.
- Multiple respondents from the same company will skew that company’s ratio a bit higher on the ‘‘Sites Reporting’’ scale.

This same bell curve (on a logarithmic scale!) has appeared now for the better part of a decade.

Salary Information

Demographics are interesting, but salaries form the heart of a salary survey. Here's a quick rundown of how some people work and get paid:

- 65.2% (2004-2005: 63.8%; 2003: 65.1%) of employees are ''generally satisfied with their compensation package'' (34.8% aren't)
- 46.1% of respondents are not specially compensated for overtime
  - 8.7% receive both cash and/or time off as compensation for overtime work
  - 9.4% receive cash compensation for overtime work
  - 35.8% receive time off as compensation for overtime work
- 68.1% of respondents are not specially compensated for 'night' (shift) work
  - 22.2% receive comp time or other compensation for special hours
  - 9.7% receive more money for special hours
- 77.7% (2004-2005: 71.6%; 2003: 73.5%; 2002: 69.9%) of respondents are at least occasionally required to be on call, wear a pager, or carry a cell phone
- 15.6% receive compensation for being on call (3.7% comp time, 9.3 money, 2.9% either/both).
- 21.1% (2004-2005: 28.4%; 2003: 25.5%; 2002: 44.2%) of respondents never carry a pager/cell phone; 46.4% (vs. 2004-2005: 44.2%) wear a pager/cell phone all the time. The rest are on call at various frequencies: 5.1% are on call one week out of two or more; 3.8% are on call one week out of three or so; 6.9% are on call one week out of four or so; 5.6% are on call one week out of five or so; 5.1% are on call one week out of six or so; 5.9% are on call sometimes, but less than one week out of six.
- 26.7% (2004-2005: 26.7%; 2003: 27.5%; 2002: 30.3%) of respondents receive some sort of stock bonus
- 91.6% of respondents work for a single employer
- 87.4% of respondents are salaried; 12.6% (2004-2005: 15.6%; 2003: 13.7%) are paid hourly

This statistical summary attempts to describe the state of salaries and salary changes over the last year by examining salary with respect to gender, age, experience, geography, industry, and other factors.

The number of respondents in certain sub-categories is occasionally too low to draw valid statistical inferences (e.g., just one person in Anchorage, Alaska). Generally, statistics that are nonreliable by virtue of their small sample size are either not reported or reported with a '#' that marks them as unreliable.

Salary Change Summary

The average salary change for those 508 full-time respondents with incomes of US$10K-US$200K with salary changes from -30% to 30% (from all nations and currencies) was 5.43%.

7.5% earned less this year; 16.5% (2004-2005: 24.1%) had no change in salary. Of those 83.8% (2004-2005: 75.9%) who increased their salaries no more than 30%, the average increase was 7.44% (2004-2005: 9.2%; 2003: 8.2%). In a surprising development, raises were spread fairly evenly throughout the salary range, with higher earners being dramatically less penalized than in the past (with a single exception).

Prior to 2004-2005, it appeared that managers were allotting a pot of raise-dollars to a number of variously paid staff; this year's dollar-value of raises continued to be *much* higher for the $100K+ brackets.

To the right is an overall chart of last year's salary changes, calculated against last year's salary − and shown by gender. It does not show experience or job categories and thus should be viewed only as an overall picture. Little gender difference appears except in the highest range, where the small number of women gives statistics from which it is difficult to draw a general conclusion.

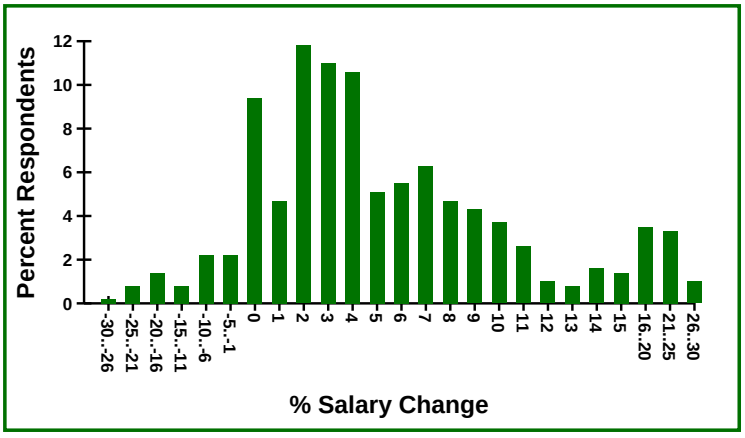
The page's final chart shows the various salary changes. It's easy to see that the 2-4% range was very popular in addition to the ''no raise.''

Increases by Salary Range

Range	% in Range	% Incr	Incr (US$)
< 20,000	1.4	6.6	901
20,000-29,999	1.0	3.7	803
30,000-39,999	5.1	5.2	1,869
40,000-49,999	9.3	7.7	3,497
50,000-59,999	13.8	5.1	2,689
60,000-69,999	15.2	5.6	3,571
70,000-79,999	16.7	5.4	3,983
80,000-89,999	13.8	4.0	3,404
90,000-99,999	8.5	4.0	3,755
100,000-124,999	11.0	6.2	6,604
125,000-149,999	2.6	7.2	9,720
150,000-174,999	1.6	3.2	4,996
175,000-199,999	0.2	28.6	51,427

Salary Raises from Year to Year

% Inc.	All	Male	Fem.	% Incr.	All	Male	Fem.
-30..-10	3.2	2.8	6.8	10..11.99	6.2	6.6	2.3
-9.99..-5	2.0	2.2	0.0	12..13.99	1.8	2.0	0.0
-4.99..0	2.0	2.0	2.3	14..15.99	3.0	2.8	4.5
0..1.99	14.2	14.9	6.8	16..17.99	1.6	1.8	0.0
2..3.99	23.2	21.9	36.4	18..19.99	1.0	1.1	0.0
4..5.99	16.0	16.0	15.9	20..29.99	5.2	5.3	4.5
6..7.99	12.0	12.3	9.1	30+	0.0	0.0	0.0
8..9.99	8.8	8.5	11.4				



Bonuses

Some companies give one-time rewards to people in lieu of changing their salary. The respondents were asked whether they received such a bonus/incentive and why:

Reasons for Bonus/Incentive

Reason	% Resp.	Reason	% Resp.
Did not receive a bonus	45.7	Other	2.2
Bonus/incentive based on your individual performance	25.7	Bonus/incentive for staying with the organization	2.1
Bonus/incentive based on how well your organization performed	19.5	Sign-on or recruiting bonus	1.6
Regular annual bonus/incentive	12.0	Bonus/incentive for obtaining a certification	[6]
Bonus/incentive based on how well your group, department, or unit performed	11.2	Bonus/incentive for relocation	[5]
Holiday bonus	8.1	Bonus/incentive for assisting with hiring	[3]
Bonus/incentive for special work (e.g., on-call, pager/cell-phone duty)	5.3	Bonus/incentive for travel	[3]
Bonus/incentive for a special project	5.1	Bonus/incentive dictated by a union or legislation	[2]
By exercising stock options	3.2	Bonus/incentive for receiving a degree	[2]

Working More

Does working more imply getting a bigger salary change? The table at the right suggests that this is true in the 50-59 hour range, where 22.4% of respondents toil.

Hrs vs. Incr.

Hours	% Incr.	% Resp.
30-39	4.0	12.4
40-44	4.8	36.4
45-49	5.8	23.4
50-54	7.1	16.7
55-59	6.8	5.7
60-64	4.6	4.1
65+	4.0	1.2

Salaries vs. Experience

Experience counts. Those with less than three years of experience report incomes that average $40,000 less than those with more than ten years of experience − but the next ten years brings only a $3,000 average gain (thus demonstrating salary compression). The charts on the next page show *total* compensation (after last year's salary change) vs. experience.

The table below summarizes the experience vs. salary numbers for those reporting in US currency. The graphs on the next page, however, are also illuminating, since they enable you to pinpoint just where you stand in the (almost) bell curve of salaries for those with similar experience.

The table includes three sets of statistics, all of which are narrowed by requiring last year's increase to be in the range -30..30, income to be in the range US$10,000..US$200,000, experience to be at least one year, weekly work at least 30 hours/week, and salary to be reported in US dollars (thus restricting the numbers mostly to the USA − no other countries had enough respondents to create valid general statistics). Statistical groups include:

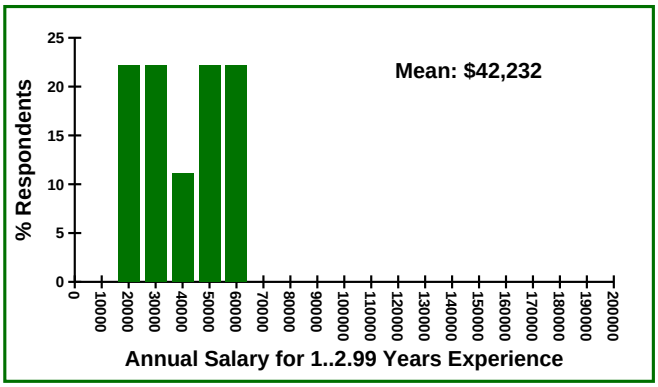
- Summary of all respondents who meet the conditions above.
- Only those who actually increased their salary during this survey's year.
- Only those who have worked for the same organization for at least two years (i.e., this column arguably shows the raises people get at an organization instead of by changing to a new job).

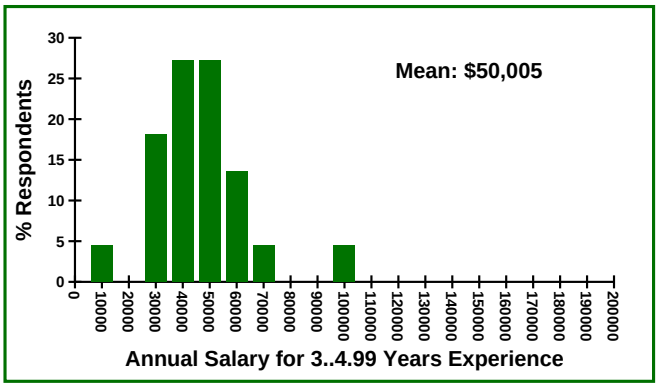
Note in all statistics that even though the percentage of increase ranges widely, the dollar increase holds much closer to constant across experience levels.

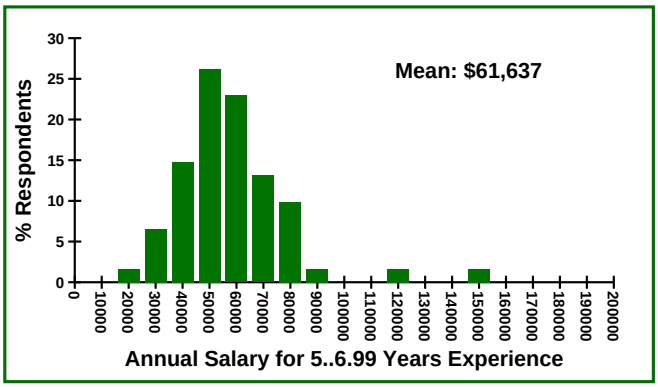
Admin Experience vs. Salary and Increase

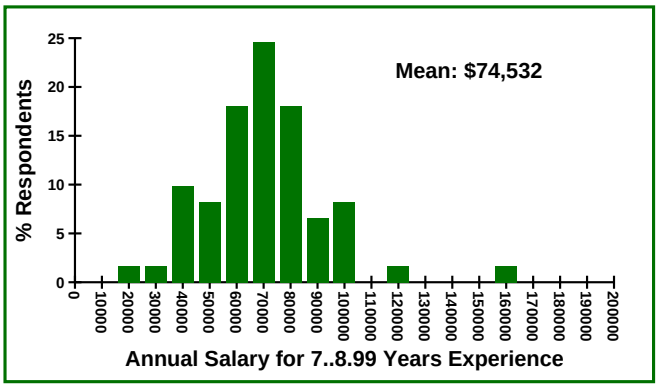
Exp Range	% Resp.	All Responses Sal.	All Responses --Incr--		Raise > 0 Sal.	Raise > 0 --Incr--		Same Co. >2 Yr Sal.	Same Co. >2 Yr --Incr--	
0..0	0.5%	31,825	5.0%	$1,595	50,000	16.3%	$8,139		0.0%	$ 0
1..2	2.2%	42,232	11.3%	$4,782	45,012	12.7%	$5,733	41,639	11.3%	$4,718
3..4	5.3%	50,005	8.5%	$4,257	52,630	9.5%	$4,992	47,154	4.5%	$2,142
5..6	14.6%	61,637	7.2%	$4,468	60,240	8.9%	$5,341	61,171	7.6%	$4,655
7..8	14.6%	74,532	7.4%	$5,545	74,443	8.7%	$6,468	75,247	6.5%	$4,907
9..10	18.4%	75,418	5.1%	$3,841	77,615	7.0%	$5,418	73,700	4.4%	$3,255
11..15	25.6%	89,730	5.5%	$4,951	90,765	6.9%	$6,279	89,857	5.2%	$4,710
16..19	8.1%	80,966	1.6%	$1,293	83,999	4.4%	$3,684	81,120	2.2%	$1,778
20+	10.8%	94,422	1.9%	$1,818	92,597	5.2%	$4,841	94,083	3.4%	$3,238

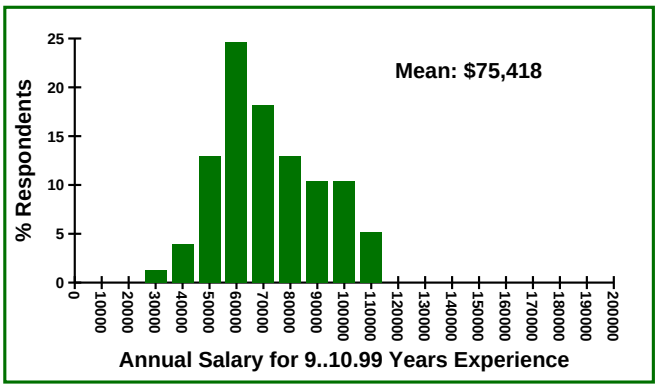
Below are the overall distributions for salary vs. experience, though they include all countries with no special processing for geography.

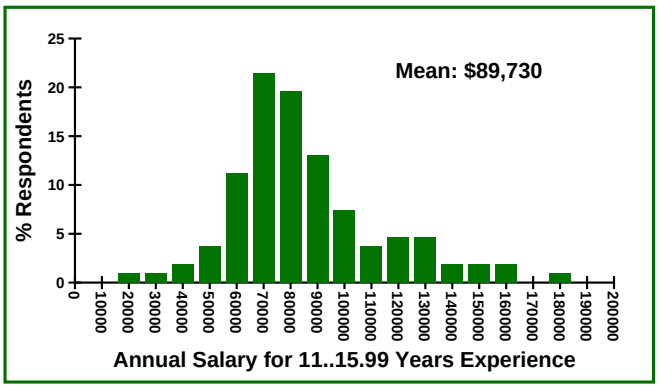


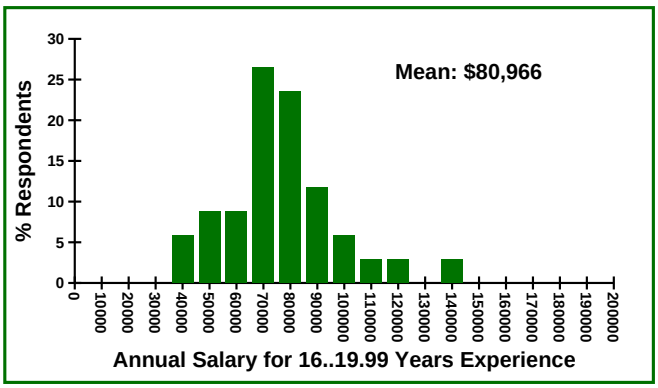


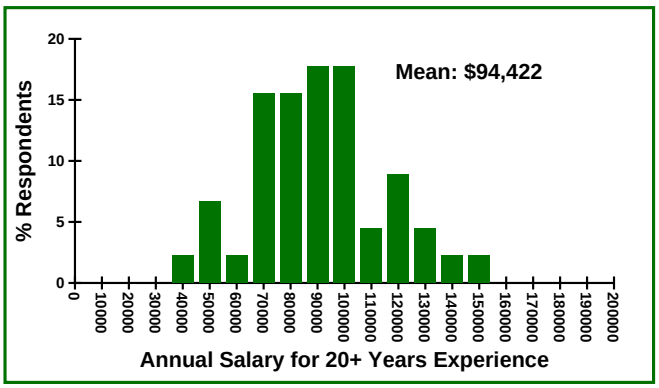












The charts show pleasing bell-curve distributions that connote the validity of the statistics. A small number of dramatically higher-paid respondents ups the average a slight bit in just about every chart. Checking the records uncovers that some of these were due to one-time bonuses for various reasons.

Gender Studies

As time goes on, women are, in general, catching up to men in experience (years ago, computer professions were truly male-dominated). The charts on the right show the distribution and average salary increase for the entire group and for men/women broken out. The top chart includes the very high and very low salaries in addition to very positive and very negative salary swings.

Women seem to be overrepresented in the $50K-59K range (again, potentially due to experience) and slightly underrepresented in the $40-49K range.

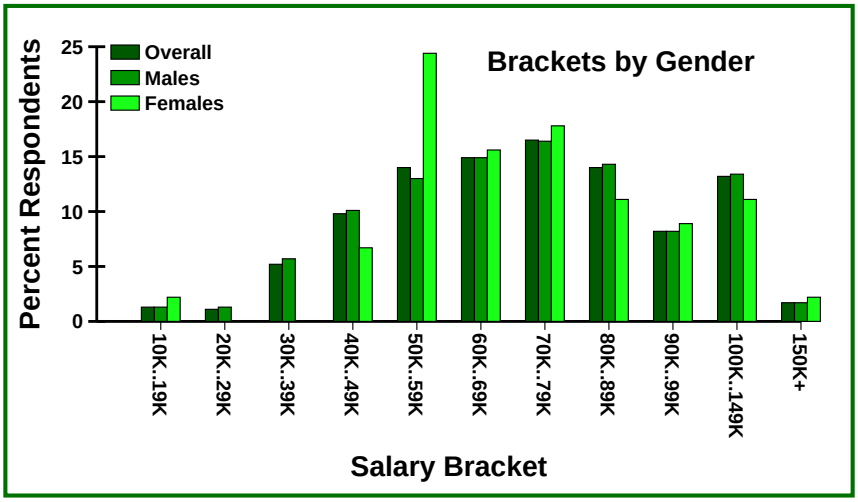
On the right below is a graphical representation of the same salary brackets by gender. Small sample sizes are worrisome, but salaries of women with more than 10 years of experience seem, after having passed men's salaries in year's 4-10, to drop significantly behind.

Salary vs. Years of Experience

	Overall		Male		Female	
Years	AvgSal	% Resp.	AvgSal	% Resp.	AvgSal	% Resp.
0..2	41,021	5.5	41,550	5.7	32,295#	3.8
3..4	44,563	6.8	42,821	6.6	57,800#	9.6
5..6	58,241	16.6	57,325	16.2	66,065	21.2
7..8	68,670	16.3	67,575	16.2	80,111#	17.3
9..10	74,746	16.6	74,015	17.1	86,800#	11.5
11..15	85,141	21.5	85,619	21.7	79,110	19.2
16..19	79,376	7.8	81,075	7.6	64,426#	9.6
20+	93,088	8.9	93,595	9.0	86,500#	7.7

Increases by Gender and Salary Range

	Overall		Male		Female	
Salary	N	Incr.	N	Incr.	N	Incr.
10,000..19,999	1.3%	6.6%	1.3%	7.8%	2.2%	0.0%
20,000..29,999	1.1%	3.1%	1.3%	3.1%	---%	---%
30,000..39,999	5.2%	5.3%	5.7%	5.3%	---%	---%
40,000..49,999	9.8%	7.3%	10.1%	7.0%	6.7%	11.9%
50,000..59,999	14.0%	5.1%	13.0%	5.5%	24.4%	3.1%
60,000..69,999	14.9%	5.8%	14.9%	6.3%	15.6%	1.7%
70,000..79,999	16.5%	5.4%	16.4%	5.3%	17.8%	6.6%
80,000..89,999	14.0%	4.2%	14.3%	4.1%	11.1%	4.3%
90,000..99,999	8.2%	4.0%	8.2%	4.2%	8.9%	2.4%
100,000..149,999	13.2%	6.4%	13.4%	6.4%	11.1%	6.6%
150,000+	1.7%	6.0%	1.7%	6.2%	2.2%	4.6%



Salary and Education

Education is often said to enhance salaries. The chart on the right (which is for general education, not technical education), while not accounting for experience, shows that this adage seems to hold true except for those with doctorates. Note that certificates do not contribute nearly as strongly as some technical school advertisements might suggest.

The second chart on the right shows average salaries compared against 'relevant' education. Except for the obvious exception at the top (education cited as being in ''Other fields''), this chart reflects a very traditional sort of observation: more, better education yields higher salaries. Upon checking those whose 'formal education is in other fields,' some are entrepreneurs (even company founders) while others live in high-cost-of-living cities or have inordinate experience. The smaller sample size caused a majority of this anomaly.

The next chart breaks down salary by experience and education. The # means that the sample is probably too small to believe the numbers.

Generally, it appears that both education and longevity pay off, though women seem a bit short-changed after 15 years of experience.

Salary vs. Education

EducLevel	AvgSal	AvgInc	% Resp.
Master's Degree	79,303	4.0%	12.7%
Bachelor's Degree	72,268	5.7%	45.8%
Ph.D./D.Sc.	72,092	4.8%	1.3%
Some College/Tech Sch	71,039	6.0%	26.5%
Associate's Degree	69,907	5.7%	6.8%
HS Diploma	59,971	1.7%	3.9%
Technical Cert(s)	59,931	6.8%	3.1%

Salary vs. Relevant Education

EducLevel	AvgSal	AvgInc	% Resp.
Other fields	80,901	6.4%	11.7%
Ph.D./D.Sc.	77,185	4.3%	[1]
Master's Degree	76,889	4.6%	8.4%
Associate's Degree	72,629	6.3%	4.5%
Bachelor's Degree	71,515	5.1%	30.2%
Some College/Tech Sch.	71,351	6.4%	16.9%
Self-taught	70,667	5.0%	18.0%
Technical Cert(s)	60,244	4.6%	10.1%

Salary and Incr. by Education/Exp.

Education level	0..1	2	3..4	5..9	10..14	15..19	20+
Master's Degree	---- ---	---- ---	27,747 18.1#	63,417 4.3	82,154 5.2	107,444 4.9	87,575 1.1
Bachelor's Degree	70,471 18.7#	54,000 10.1#	52,977 8.0	63,358 7.3	87,608 3.7	78,153 2.0	88,100 1.2
Assoc. Degree	20,696 14.4#	57,258 0.0#	50,000 13.6#	54,528 11.7	86,411 5.5	75,580 3.3#	98,832 -1.1#
Some Coll/Tech Sch	32,122 3.5#	30,900 3.3#	43,400 11.8#	67,136 7.2	78,321 6.1	78,642 4.4	95,760 7.8#
Technical Cert(s)	---- ---	20,000 0.0#	37,578 6.6	59,047 9.0	72,853 3.4	59,234 0.7	94,750 -5.1#
High School Diploma	---- ---	32,295 10.8#	---- ---	75,547 7.8	89,675 7.4	87,545 1.1	103,966 4.8
Less than HS Diploma	---- ---	42,356 14.0#	14,500 -2.4#	65,549 5.9	71,932 5.5	85,315 1.3	97,208 2.8

Salary in USA Metro Areas

The cost of living varies in different cities (e.g., New York City is very expensive; Kansas City is less so). The chart below shows how compensation varies in some of the larger tech cities. All salary reports are converted to dollars using 20 July 2006 exchange rates.

Average Salary by Metro Area

Metro area	Salary	% Incr	% Resp.	Metro area	Salary	% Incr	% Resp.
New York Metro Area	104,526	5.1	3.6	Austin, TX Metro Area	80,240	6.7	1.2
San Francisco/San Jose/Silicon Valley, CA, Area	95,815	4.5	11.2	Atlanta, GA Metro Area	76,357	5.4	2.2
Washington, DC, Metro Area	89,692	6.0	6.6	Boston, MA, Metro Area	75,236	4.3	6.3
San Diego, CA, Metro Area	88,397	5.2	1.9	Seattle/Redmond, WA Metro Areas	72,787	5.6	4.6
Los Angeles/Orange Co., CA, Metro Area	85,026	5.3	5.6	Research Triangle, NC	72,768	1.8	1.2
Denver, CO Metro Area	82,966	5.6	3.6	N/A	63,033	6.3	36.3
Chicago, IL Metro Area	82,273	6.9	3.2	Toronto, ON, Metro Area	61,310	5.6	2.9
Dallas, TX Metro Area	82,083	2.7	2.2	Philadelphia, PA, Metro Area	60,277	6.1	2.2
Houston, TX Metro Area	80,750	8.3	1.0	Montreal, QC, Metro Area	51,532	6.9	1.5

Salary in USA Metro Areas by Experience

The chart on the next page factors in both self-reported (vs. derived) geography and experience; all salaries are converted to US$.

The # symbol means the sample size is small and not trustworthy; boxes with '----' had few or no samples.

Avg Salary/Raise by Area/Experience

Area	0..1	2..4	5..9	10..14	15..19	20+
New York Metro Area	---- ----	---- ----	104,250 7.8	93,780 4.0	109,333 7.7#	118,000 0.6#
San Francisco/San Jose/Silicon Valley, CA, Area	---- ----	74,000 13.2#	80,865 5.2	111,592 6.2	102,714 0.0	110,066 -3.0#
Washington, DC, Metro Area	---- ----	---- ----	83,083 5.6	102,240 8.7	87,400 5.3	90,666 3.0#
San Diego, CA, Metro Area	---- ----	---- ----	42,750 9.2#	109,500 2.8#	82,680 1.8#	106,666 5.3#
Los Angeles/Orange Co., CA, Metro Area	---- ----	60,500 10.0#	84,900 5.5	99,002 6.3	78,250 3.4	102,500 3.5#
Denver, CO Metro Area	---- ----	---- ----	64,600 3.9	104,750 9.3	80,500 6.3#	87,000 2.6#
Chicago, IL Metro Area	---- ----	---- ----	60,262 9.8	77,800 7.6	105,833 4.4#	122,000 0.0#
Dallas, TX Metro Area	---- ----	---- ----	61,123 10.3#	71,625 -1.7	108,500 2.8#	113,000 4.6#
Houston, TX Metro Area	---- ----	---- ----	87,500 8.3#	74,000 8.4#	---- ----	---- ----
Austin, TX Metro Area	---- ----	---- ----	54,000 20.0#	79,600 3.0#	94,000 3.7#	---- ----
London, England Metro Area	---- ----	---- ----	73,132 11.6#	85,903 2.2#	---- ----	---- ----
Atlanta, GA Metro Area	---- ----	40,450 2.7#	68,000 11.7#	98,500 4.0#	76,818 7.4#	98,000 0.0#
Boston, MA, Metro Area	---- ----	64,666 6.7#	69,437 6.4	78,603 6.6	87,333 -4.4#	80,000 -20.0#
Ottawa, ON, Metro Area	70,471 18.7#	---- ----	---- ----	73,995 1.6#	---- ----	---- ----
Seattle/Redmond, WA Metro Areas	---- ----	---- ----	59,800 10.6	77,736 4.7	75,666 0.6#	84,333 2.7#
Research Triangle, NC	---- ----	---- ----	61,920 6.6#	67,000 1.5#	97,000 9.0#	76,000 -14.6#
Sydney, Australia Metro Area	---- ----	---- ----	56,120 3.4#	82,310 10.0#	---- ----	---- ----
N/A	29,266 6.2	39,095 10.0	61,435 7.8	66,329 4.6	83,421 3.6	84,189 2.7
Toronto, ON, Metro Area	---- ----	57,258 0.0#	52,727 9.3	71,529 7.6#	63,424 4.3#	87,208 -4.9#
Philadelphia, PA, Metro Area	---- ----	42,500 5.4#	68,000 5.4#	89,440 14.7#	58,015 4.7	---- ----
Montreal, QC, Metro Area	---- ----	39,640 4.7#	48,155 9.8#	61,663 2.9#	63,424 4.3#	---- ----
Vancouver, BC, Metro Area	---- ----	---- ----	57,258 0.0#	---- ----	44,926 -17.7#	---- ----

SAGE Job Classifications vs. Salary

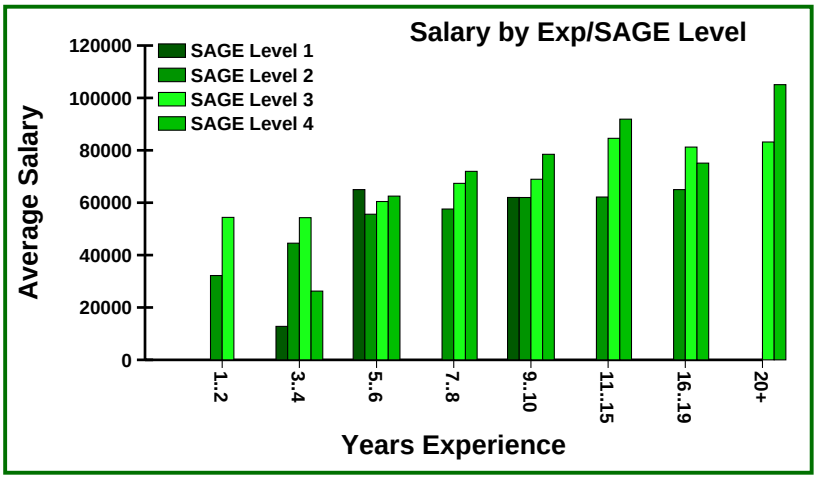
The SAGE job classifications were detailed on page 6. This table shows how classification and experience affect salary. Generally, higher numbers seem to appear exactly where one would expect.

Increase/Salary for SAGE Classif. and Experience

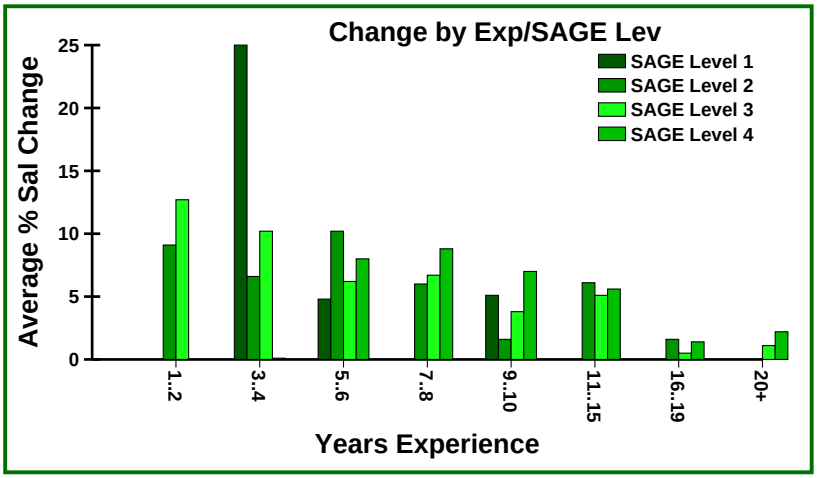
	Level 1		Level 2		Level 3		Level 4		N/A	
Exp Yrs	Sal	%Incr	Sal	%Incr	Sal	%Incr	Sal	%Incr	Sal	%Incr
1..2	----	----	32,196	9.1	54,392	12.7	----	----	19,795#	0.0#
3..4	12,786#	25.0#	44,544	6.6	54,281	10.2	26,250#	0.1#	15,069#	9.1#
5..6	65,000#	4.8#	55,600	10.2	60,452	6.2	62,511	8.0	39,050#	14.2#
7..8	----	----	57,585	6.0	67,382	6.7	71,965	8.8	107,267#	4.2#
9..10	62,000#	5.1#	61,982#	1.6#	68,951	3.8	78,474	7.0	56,509#	0.0#
11..15	----	----	62,165	6.1	84,578	5.1	91,891	5.6	84,837#	3.2#
16..19	----	----	65,000#	1.6#	81,229	0.5	75,107	1.4	67,500#	-3.6#
20+	----	----	----	----	83,172	1.1	105,064	2.2	92,063#	3.4#

The '#' symbol means the number of respondents is small and not to be trusted too much. In fact, almost every statistic (but not quite all) that appears anomalous is indeed marked that it is not to be trusted.

On the right is a graphical chart of the salaries. It is extremely intuitive, with higher salaries for more experience and apparently higher skill levels.



On the right is a graphical chart of the salary increases for the various SAGE levels. The effects of salary compression are exposed here as the presumably younger admins catch up to the older respondents.



Salary by Focus, Experience, and Region

Sometimes it is easier to compare salaries and increases by focus (job title). The charts to the right and on the next page explore that possibility. Foci are sorted roughly in descending order of apparent earning power.

The # symbol means the sample size is small and not to be trusted too much.

Refining data to ever smaller subsets sometimes yields sample sizes that are too small. However, it is very useful to explore the salary and salary changes for regions, specialties, and experience. It is the tables below and on the next pages that can make it easy to compare salaries. These regions were derived from reported zip codes.

Salary and Raise by Title and Years of Experience

Title	2..4	5..9	10..14	15..19	20+
Technical lead	---	67,862 5.0	105,998 6.4	88,467 -1.8	89,668 2.0
Project management	---	65,248 4.0	101,750 6.0#	86,000 4.9#	102,910 -0.1#
Networking	34,450 3.0#	62,309 8.3	96,757 9.1	77,345 2.4#	---
People management	---	106,446 9.3#	92,203 6.4	109,333 8.2#	---
Security	49,983 5.6#	81,634 5.1	82,893 4.1	99,833 5.9	83,000 5.6#
Server management	47,410 9.9	63,031 8.4	78,286 4.7	79,222 2.9	94,635 2.6
Databases	---	59,480 6.2#	76,899 3.3#	---	---
Generalist	46,737 11.4	65,697 6.2	73,578 3.7	81,162 0.5	95,623 -2.0
Other	28,886 4.7#	64,457 7.8	71,311 9.6	70,666 6.2#	107,290 3.5
Desktop	---	---	60,500 3.6#	---	---

Salaries (K$)/Raises by Region and Experience

Region	1..2	3..4	5..6	7..8	9..10	11..15	16..19	20+
Balt/Wash., DC+	--- ---	--- ---	81.1 9.2	83.1 2.3	--- ---	101.0 6.8	--- ---	--- ---
Boston+Area	--- ---	--- ---	--- ---	--- ---	75.8 7.3	89.5 4.5	--- ---	--- ---
Chicago	--- ---	--- ---	--- ---	66.6 8.8	--- ---	112.5 8.5	--- ---	--- ---
Denver/ Front Range	--- ---	--- ---	--- ---	--- ---	--- ---	106.8 11.5	--- ---	--- ---
Los Angeles	--- ---	--- ---	--- ---	--- ---	--- ---	97.8 5.8	82.1 2.9	--- ---
New York	--- ---	--- ---	--- ---	--- ---	95.2 3.9	113.1 4.8	--- ---	--- ---
Philadelphia	--- ---	--- ---	--- ---	--- ---	--- ---	71.1 6.7	--- ---	--- ---
Portland	--- ---	--- ---	--- ---	--- ---	70.0 7.2	--- ---	--- ---	--- ---
San Jose	--- ---	--- ---	65.1 0.5	92.4 7.9	97.9 4.5	123.7 3.1	--- ---	--- ---
Seattle	--- ---	--- ---	--- ---	--- ---	--- ---	88.9 6.0	--- ---	87.8 4.0

On the right is the same data derived from country codes; only one country had enough respondents.

Salaries (K$)/Raises by Region and Experience								
Region	1..2	3..4	5..6	7..8	9..10	11..15	16..19	20+
Canada	---	---	55.4	59.8	59.7	74.3	64.3	80.9
	---	---	9.2	7.1	6.5	3.0	-4.3	-5.7

Do Large Companies Pay More?

The chart below shows how salaries are distributed at companies of various sizes. It appears that larger companies not only have more admins (something that is obvious but that you can't tell from the chart) but also have more admins in the higher pay brackets (something the chart shows very clearly).

Resp's @Salary / Company Size								
Salary	0..9	10..49	50..99	100..499	500..999	1000..4999	5000+	Total
0..29,999	13.3%	8.5%	10.3%	4.0%	0.0%	3.1%	3.2%	4.3%
30,000..39,999	13.3%	15.5%	10.3%	8.0%	11.4%	6.1%	3.5%	7.1%
40,000..49,999	13.3%	21.1%	20.5%	12.0%	9.1%	16.3%	6.7%	11.7%
50,000..59,999	13.3%	14.1%	15.4%	11.0%	9.1%	14.3%	13.8%	13.2%
60,000..69,999	13.3%	7.0%	5.1%	20.0%	22.7%	12.2%	17.0%	15.2%
70,000..79,999	13.3%	15.5%	10.3%	14.0%	11.4%	17.3%	15.2%	14.8%
80,000..89,999	6.7%	5.6%	7.7%	10.0%	13.6%	11.2%	15.9%	12.3%
90,000..9,9999	0.0%	4.2%	2.6%	9.0%	4.5%	8.2%	8.8%	7.4%
100,000..149,999	13.3%	5.6%	12.8%	10.0%	18.2%	10.2%	14.1%	12.2%
150,000+	0.0%	2.8%	5.1%	2.0%	0.0%	1.0%	1.8%	1.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Salaries by Industry and Size

Charts on this and the following pages show salaries and increases on an industry-by-industry basis with columns representing different sizes of organization within each industry. **Entries marked with '#' have almost no chance of being statistically valid.** Statistics were limited to salaries in the range of US$10,000..$200,000 and raises in the range -30%..30%. No other restrictions were applied (i.e., these charts include a global geography).

Trends in these data were very hard to discern.

Salary/Raise by Industry & Size

	0..99		100..499		500..999		1000+	
Accounting	----	----	----	----	----	----	86,362	6.8#
Advertising, Public Relations, Communication, or Marketing	51,987	0.0#	70,500	6.8#	55,500	10.6#	92,105	12.2
Aeronautical/aerospace	34,000	6.2#	87,903	7.7#	----	----	92,937	4.7
Agriculture	----	----	----	----	----	----	48,449	10.0#
Architecture (buildings)	52,000	-13.3#	----	----	----	----	----	----
Automotive	----	----	75,000	4.2#	84,600	2.7#	88,100	5.9#
Biotechnology	----	----	----	----	60,000	0.0#	61,000	10.9#
Broadcasting/Cable/Video	----	----	----	----	63,000	5.0#	124,800	0.0#
Computer hardware/semiconductor	93,600	4.0#	----	----	----	----	95,553	5.9
Construction	37,673	0.0#	63,000	0.0#	----	----	47,171	9.6#
Consulting and Business Services	48,000	11.6#	135,000	8.9#	62,000	12.7#	91,800	3.2#
Defense	72,000	10.8#	----	----	----	----	76,820	12.6
Distribution/Warehousing	----	----	----	----	63,000	26.0#	----	----
Education - College or University	72,850	3.7#	64,244	2.3	68,000	2.8#	66,576	3.8
Education - Commercial, training, etc.	----	----	51,450	5.7#	----	----	----	----
Education - Elementary or Secondary	----	----	70,000	4.5#	61,594	3.0#	53,875	6.7
Energy Production or Mining (oil, coal, etc.)	----	----	----	----	----	----	87,500	3.1#
Engineering	----	----	69,250	4.1#	----	----	75,762	8.1
Entertainment	----	----	52,854	9.1#	----	----	110,144	5.6
Environmental Services	----	----	----	----	----	----	48,679	8.2#
Financial services (all kinds)	65,500	13.2	116,900	9.1	100,659	5.6#	87,080	3.2
GIS/cartography/mapping	40,000	1.3#	----	----	----	----	----	----
Gambling/gaming/lottery	70,000	6.1#	57,102	9.4#	40,000	6.7#	----	----
Government - Contracting	52,000	5.1#	42,500	17.2#	90,666	5.2#	82,353	4.9
Government - Military	113,000	11.9#	105,000	5.0#	----	----	102,000	5.2#
Government - Non-Military	62,200	3.5#	89,000	3.5#	39,956	7.1#	78,400	-1.5
Health Care, Medicine	----	----	62,000	3.8#	59,750	25.6#	84,653	6.2
Hospitality	----	----	----	----	45,000	12.5#	53,463	-5.4#
Human resources/human capital/recruiter	----	----	61,663	0.0#	----	----	----	----
IT Company: Consulting	90,082	2.6	40,184	6.7#	----	----	73,617	2.7
IT Company: ISP/ASP	62,956	6.6	89,250	5.1	101,500	12.5#	58,779	4.9
IT Company: Other	75,070	6.3	100,284	5.7#	----	----	68,827	0.4
IT Company: Security	43,186	9.2#	90,000	3.8#	----	----	----	----
IT Company: Software Development	75,161	3.0	72,519	3.7	75,970	7.4#	101,019	6.2

Salary/Raise by Industry & Size

	0..99		100..499		500..999		1000+	
IT Company: Web development/webmaster	48,000	20.0#	80,000	0.0#	----	----	64,663	-1.5#
Insurance/risk management	64,711	13.9#	60,000	7.1#	----	----	96,343	6.0#
Intellectual property	115,000	4.5#	----	----	----	----	----	----
Legal	----	----	----	----	----	----	70,451	9.5#
Library	----	----	13,650	-6.2#	----	----	----	----
Manufacturing	----	----	41,272	8.2#	89,666	11.3#	81,960	-0.9
Not-for-profit	49,201	11.9	54,320	5.5	87,360	0.0#	----	----
Other, please specify briefly	34,750	3.8#	63,160	11.7	53,633	8.2#	76,591	4.0
Pharmaceuticals	----	----	----	----	----	----	104,994	8.2#
Publishing	74,000	2.6#	67,068	7.3#	120,000	4.3#	71,918	4.1
Research	62,407	12.1#	69,358	17.1#	----	----	65,821	8.3
Retail	----	----	93,424	5.2#	60,000	9.1#	68,250	6.6
Services (other)	----	----	----	----	----	----	69,500	8.2#
State or Local Government	----	----	53,388	9.8#	48,000	0.0#	51,000	4.6#
Telecommunications	54,599	6.6	84,275	6.7	----	----	76,330	6.0
Transportation	----	----	54,968	2.3#	----	----	67,666	6.3#
Travel/Recreation	----	----	----	----	----	----	37,673	7.1#
Utility	55,569	3.8#	----	----	----	----	69,032	8.4#
Wholesale	48,974	3.7#	----	----	----	----	----	----

Salaries by Industry and Experience

This 1.5 page chart shows salaries and increases on an industry-by-industry basis with columns representing different levels of experience. **Entries marked with '#' have almost no chance of being statistically valid.** Statistics were limited to salaries in the range of US$10,000..$200,000 and raises in the range -30%..30%. No other restrictions were applied (i.e., these charts include a global geography).

Trends in these data were easier to discern: more experience generally gets a higher remuneration.

Salary/Raise by Industry & Experience

	1..3		4..6		7..9		10..14		15+	
Accounting	----	----	----	----	86,362	6.8#	----	----	----	----
Advertising, PR, MarCom	100,000	6.4#	54,487	4.5#	90,500	14.8#	74,205	8.0	----	----
Aeronautical/aerospace	----	----	34,000	6.2#	----	----	82,951	5.8#	95,070	4.8
Agriculture	----	----	----	----	48,449	10.0#	----	----	----	----
Architecture (buildings)	----	----	----	----	----	----	----	----	52,000	-13.3#
Automotive	----	----	----	----	91,200	9.5#	75,000	4.2#	84,800	2.5#
Biotechnology	61,000	10.9#	----	----	----	----	60,000	0.0#	----	----
Broadcasting/Cable/Video	----	----	----	----	93,900	2.5#	----	----	----	----
Computer hardware/semiconductor	----	----	54,000	20.0#	93,645	8.9#	95,840	2.1	117,500	3.1#
Construction	----	----	41,600	14.3#	52,742	5.0#	50,336	0.0#	----	----
Consulting and Business Services	----	----	55,000	12.2#	----	----	105,200	5.7#	100,000	3.5#
Defense	72,000	20.0#	65,300	14.0	75,347	13.3#	85,504	7.9#	120,000	4.3#
Distribution/Warehousing	----	----	----	----	63,000	26.0#	----	----	----	----

Salary/Raise by Industry & Experience

	1..3		4..6		7..9		10..14		15+	
Education - College or University	47,684	6.8	57,093	3.7	67,235	4.1	66,381	3.4	75,249	3.4
Education - Commercial, training, etc.	----	----	----	----	51,450	5.7#	----	----	----	----
Education - Elementary or Secondary	----	----	51,597	8.6#	----	----	70,000	4.5#	57,966	4.2#
Energy Prod./ Mining	----	----	----	----	70,000	6.1#	94,000	3.3#	98,500	0.0#
Engineering	12,786	25.0#	101,867	3.3#	63,224	8.4#	86,833	7.3#	81,000	1.8#
Entertainment	----	----	----	----	55,609	6.5#	142,666	8.3#	87,250	2.4#
Environmental Services	----	----	48,679	8.2#	----	----	----	----	----	----
Financial services (all kinds)	40,000	25.0#	94,500	13.4#	79,000	1.7#	94,649	6.3	89,190	2.1
GIS/cartography/mapping	----	----	40,000	1.3#	----	----	----	----	----	----
Gambling/gaming/lottery	40,000	6.7#	----	----	57,102	9.4#	70,000	6.1#	----	----
Government - Contracting	43,500	7.2#	73,000	14.6#	73,000	6.1	81,750	3.5#	97,171	2.3
Government - Military	----	----	----	----	102,000	5.2#	113,000	11.9#	105,000	5.0#
Government - Non-Military	31,218	9.3#	53,200	3.6#	59,666	6.7#	81,012	1.2	79,434	-4.1
Health Care, Medicine	54,379	3.6#	59,666	10.0#	68,650	19.6#	81,731	7.3	102,056	5.5
Hospitality	----	----	53,500	9.7#	----	----	----	----	44,926	-17.7#
Human resources/human capital/recruiter	----	----	----	----	----	----	61,663	0.0#	----	----
IT Company: Consulting	40,184	6.7#	33,000	0.0#	63,047	4.2	73,000	14.1#	106,786	-0.3
IT Company: ISP/ASP	----	----	60,757	5.8	63,288	5.5	81,083	10.2	92,500	0.2#
IT Company: Other	20,000	0.0#	56,233	5.8	88,892	7.7	63,666	-7.0#	110,050	6.3
IT Company: Security	----	----	41,402	11.9#	----	----	51,579	7.7#	75,000	4.2#
IT Company: Software Development	55,190	13.1#	65,832	4.3	66,072	4.9	99,677	5.1	111,702	0.1
IT Company: Web development/webmaster	33,795	10.0#	76,700	-5.5#	----	----	101,000	6.3#	----	----
Insurance/risk management	----	----	60,000	25.0#	66,000	7.3#	82,160	9.5#	89,667	5.9#
Intellectual property	----	----	----	----	----	----	----	----	115,000	4.5#
Legal	----	----	59,902	16.4#	----	----	81,000	2.5#	----	----
Manufacturing	----	----	55,250	6.4#	62,022	6.5#	70,920	2.9	97,000	0.1
Not-for-profit	----	----	53,223	5.6	53,266	13.3#	73,250	6.4#	37,673	0.0#
Other, please specify briefly	35,010	3.9	63,212	8.8#	70,000	19.7#	66,000	5.8#	83,500	2.9
Pharmaceuticals	----	----	----	----	----	----	104,994	8.2#	----	----
Publishing	----	----	57,500	6.5#	51,909	4.5#	89,682	4.7	78,000	2.6#
Research	66,000	10.0#	49,264	15.1	77,592	4.8#	88,500	7.1#	79,000	5.6#
Retail	----	----	57,000	6.6#	93,000	0.0#	78,212	8.2	----	----
Services (other)	----	----	----	----	70,000	16.5#	69,000	0.0#	----	----
State or Local Government	43,164	8.9#	50,000	4.2#	75,000	15.4#	42,000	5.0#	50,000	2.5#
Telecommunications	34,867	15.8#	44,736	9.5#	71,445	5.8	84,491	6.0	88,014	1.5
Transportation	----	----	50,000	4.2#	64,984	6.5#	----	----	78,000	4.0#
Travel/Recreation	----	----	----	----	37,673	7.1#	----	----	----	----
Utility	----	----	53,000	1.9#	72,717	11.2#	59,901	4.4#	----	----
Wholesale	----	----	----	----	58,962	5.5#	29,000	0.0#	----	----

Opinions and Comments

The survey affords a rare opportunity to query professionals about ideas and on a variety of subjects. This section describes the results.

Why Did Salary Change?

Respondents were asked why their salary changed. They could each choose several items from a list and also enter extra information. Almost two-thirds believe that hard work and/or good work ethic was the cause of their salary change. Just over a third believed tangible results (stable environment, achieving goals) was responsible. Here's the whole chart:

Why Salary Changed

Percent	Reason	Percent	Reason
32.9	Did not receive at least 4% raise	1.5	Other
18.9	Performance	1.3	Corporate success/profit sharing
14.2	Achieved goals	1.2	Contractual
12.2	Annual raise	1.2	Collective bargaining/union
10.0	Increased responsibilities	1.2	Longevity
8.7	Worked hard with a positive attitude and ethic	1.2	Earned a certification (i.e., SANS/GIAC, MCSE, CCNA, CISSP, etc.)
7.9	Maintained a stable network or system environment	[6]	Increased hours/overtime
5.3	Became involved in a high-profile project	[6]	Raise to combat other job offer(s)
5.0	Grew into a more active planning/management role	[6]	Used a salary survey to educate your management/HR
4.3	Changed (reclassified) position	[6]	Salary freeze lifted
4.3	Changed employers/job	[6]	Publicized achievements
4.0	Promotion	[5]	Departure of others
3.8	Client/customer satisfaction	[5]	Threatened to leave/quit
3.5	Cost of living adjustment/COLA	[4]	Earned a college/advanced degree
2.9	Long time without raise	[3]	Corporate buyout/takeover
2.5	Requested/negotiated salary increase	[3]	Probation ended
2.1	Standard/across-the-board raise	[3]	Upgraded skills via education
1.8	Changed to management	[2]	Relocation within same company
1.8	Stayed in position (vs. 'quitting')	[1]	Went into consulting
1.6	Improved speaking, writing, and/or presentation skills		

What Do Admins Like About Their Jobs?

What do admins like about their jobs? It turns out that the #1 property cited by respondents was a casual work environment, cited by just under one-third of those who answered this question. Second place was 'challenge,' with quality of co-workers, environment flexibility, and job stability rounding out those marked by more than 20% of the survey participants. The table below shows the entire set of standard responses.

Favorite Job Properties

Percent	Property	Percent	Property
31.3	Casual dress, atmosphere, environment	6.2	Telecommuting
25.0	Challenge	5.9	Dynamic environment
22.5	Learning on the job	5.6	Subsidy for cell, home telecomm, hardware
22.3	Co-workers	5.1	Standard workweek
18.5	Flexible working environment, freedom	4.4	Pension/retirement program
17.8	Stability, job security	4.0	Comp time
17.2	Flexible hours	3.8	Walled offices
15.6	Salary/compensation	3.7	Vacation/sabbatical policy
14.2	Technology, advanced equipment, fast Internet	3.5	Family friendly
13.5	Responsibility	3.4	Free or cheap food, drink at work
13.1	Location/commute time	3.4	No on-call/pager/overnight/weekend
12.5	Benefits	2.5	Gym/pool/health club membership (or on-site)
12.3	Academic environment	2.5	Facilities, phys. environment
12.0	Self-determination (of all kinds)	2.3	Enlightened policies
11.7	Respect, trust	1.9	No overtime
11.3	Small company environment	1.8	Stock purchase, grant plans
11.3	Job satisfaction	1.5	Transportation (company car, free parking, bus subsidy, carpooling, etc.)
10.4	Variety of tasks	1.5	Social activities
10.3	Management/boss	1.3	Discounts, free merchandise
10.1	Fun	[5]	Dogs allowed at company
9.8	Culture	[5]	Green card assistance
9.7	Projects	[5]	Short workweek
9.5	Specific technology that you use (e.g., MS, Opensrc)	[4]	Smoking policy
8.8	Education, tuition, training, incl. conferences	[4]	Special rewards (e.g., cruises)
8.7	Special hardware (e.g., laptop, supercomputer)	[2]	Movies, entertainment
7.5	Future potential	[2]	Travel, cruises
7.3	Sense of achievement	[2]	Sabbaticals
6.3	Employment in current economic climate	[1]	Child care

The 'Other' category did not yield any replies that appeared more than once other than ''It's nice having a job.''

What Do Admins Dislike About Their Jobs?

What about the other side of the coin? What are the most disliked features of sysadmin jobs? Corporate management issues! Look at the breakdown (bearing in mind respondents could cite more than one dislike): bureaucracy/paperwork at 20.6%, not enough staff at 16.2%, management [in]competence at 16.2%, compensation issues at 14.2%, leadership issues/poor vision at 13.2%, lack of leadership at 11.5%, and conflicting demands at 10.1%. The table shows the rest.

Worst Job Properties

Percent	Property	Percent	Property
20.6	Bureaucracy, paperwork,	5.0	Project management
16.7	Not enough staff	4.4	Lack of accountability
16.2	Management competence	4.3	Benefits (in general)
14.2	Bad compensation	4.3	Coworkers
13.2	Leadership issues, poor or poorly communicated vision	4.0	Human resource dept. issues
12.2	Compensation/payscale	4.0	Culture
11.5	Lack of leadership	4.0	Lack of trust
10.1	Conflicting demands	3.7	Corporate stability, layoffs
9.7	Salary, benefit issues	3.4	Management stability
9.7	Interruptions	3.4	Hiring issues (incl. nepotism)
9.5	Poor respect or low value placed on my job; poor visibility in org.	3.2	Computer security issues overwhelming
9.1	Ceiling on advancement or low advancement speed	3.2	Coping with growth or force reduction
9.0	Infrequent salary increases	3.1	Work hours
8.7	Boredom	2.9	Outsourcing
8.5	Poorly communicated or differentiated priorities	2.8	No conference attendance
8.5	Excessive on-call time	2.6	Unrealistic job performance expectations
8.1	Politics	2.6	Keeping up with advances
7.9	Cubicles/offices/noise	2.5	Bad retirement plan
7.8	Technical issues (outdated equipment, 'Microsoft culture')	2.5	Ethical issues
7.6	Budgets, funding	2.3	Customers/clients
7.2	Vision, future planning (lack thereof)	2.3	Attire/dress code policies
7.2	Lack of opportunity	2.2	Compliance (e.g., SOX)
6.8	Bad infrastructure	2.2	Education/training issues
6.6	Morale	2.1	Time off/vacation issues
6.5	Overtime/on-call compensation	2.1	Inflexibility
6.2	Hardware isn't up to snuff	1.9	Parking
5.7	Lack of peers	1.8	Location
5.7	Infrequent salary reviews	1.5	Discrimination, tolerance issues (age, race, creed, orientation, etc.)
5.7	Commute	1.3	Specific vendors (or lack of specific vendors)
5.4	Cost of living	[5]	Travel
5.3	Inability to see reality	[2]	Union issues
5.3	On-call or pager/mobile phone issues	[2]	Safety
5.0	Lack of training/cont. ed.	[1]	Smoking policy

The only 'Other' comments that appeared more than once were ''stress'' and the related ''workload.''

Survey Comments

Many people entered comments in reply to an open-ended question about the state and future of the system administration profession. They have been partitioned into sections with related topics:

- Frustration
- The Profession
- Advice
- The Future
- Optimism
- Desires

The incredible frustration of the 2003 survey has returned a bit.

Most of the comments entered are included below, unedited.

Frustration

This category is broken into several subcategories: Management, Outsourcing (surprisingly small this time), Compensation, Appreciation/Understanding, Unreasonable Expectations, Morale, and Microsoft.

Management

> *My org's leadership wants IT to be like telephone and electric infrastructure, but won't pay for the infrastructure and equipment refreshes needed to make it ubiquitous and reliable.*
>
> *Our great chief command superior boss, who by to way reminds Dilberts boss, has decided that because everyone will not fit into rooms something has to be done in the name of equality. Thous who are working in open space office, like I, might envy thous who has room so doors must be removed. Practically those who had rooms where small bosses who need some privacy coz they have to take care human resource thing etc, but now doors are away. Obviously this is problem, there's need for privacy but the envy thing, which by to way didn't exist if you ask from me. Problem is solved that one can get door back if one has special permission to have it. It didn't take long that doors started to appear in rooms and not all of them where "legal". Boss made decision that if one have special permission copy of permission must be taped on door so thous doors which are illegal can be taken away again and secretaries act as door police. I wonder what might be next decision / reaction in this door weirdness. As you can image all important decisions, like how our products should be developed, are in halt because bosses are thinking about doors.*
>
> *Working for the state of [...] has been on of the biggest issues. The legislature simply does not recognize the importance of reasonably compensating state employees. By far, the biggest frustration is that management has put me in a dead end situation. They do not accept feedback and the Vice Chancellor has taken on more of a dictatorship on how things should be run at the lower levels. Furthermore, management assumes that everyone else aspires to be a manger too rather than remain in the technical arena. I'm buried in project management work and have almost no time to do real system administration that I like to do.*

Outsourcing

> *Company is downsizing -- wonder when my job will be offshored to Bangalore*

Compensation

> *This company is currently compensating the employees about 10-15K per year below the salary.com and U.S. Department of Labor salary estimations for this geographical region. Management continues to inform the employees that they are looking into this issue and are studying a resolve, it is going on 4 years now without a resolve!*
>
> *People continue to saturate the field and accept jobs for less than they are worth, hurting the rest of the field.*

Appreciation/Understanding

UNIX Systems Administration is interesting, fun work. I love all the directions I could go with it and never got bored because I was always learning. I am a 48-year-old woman, and the arrogance and childishness of the men in this field have finally driven me away. People who would rather find ways to assign blame than actually fix a problem seem to be the norm in this field. So, I've shifted gears and am going into the softer tech world of tech writing and scripting, not because I couldn't handle the work but because I couldn't handle the assholes.

The "dot com" era probably hurt system administration as a career, and contributed to the sparse years of employment which followed. E.g. any semi-trained/talented hack pretender who could spell "nfs" and had tossed a Redhat CD into a PC a couple times could (and did) get hired as a sysadmin during the boom time. Unfortunately, not enough of those types were flushed out when the bubble burst, and even worse: some of them survived and became management. As a result, many operations consider system administration to be less-than-valuable, and treat their staff accordingly − e.g. as little more than "electronic janitors", rather than important members of the company who can (and usually do) contribute to the overall benefit of the organization, if only by providing a stable infrastructure for the users to work in.

Most of the time when I speak with admins I hear the same thing. They have alot of work and are not given the time or resources to do it properly. Wants and needs far out weigh the reality of staffing and time. A company that can build out an infrastructure on a shoe string budget is admirable. After that, it is time to add staff and resources to make sure that what you built is standing on a firm foundation. I don't think alot of management understand that.

Unreasonable Expectations

Organization has increased workload with a crushing weight of paperwork/auditing responses/meetings and bureaucracy, and decreased number of employees. Wait time for clients has gone from 48 hours of turnaround to 2+ weeks to response. On call/comp time degraded, no raises, no time for training. Corporate attitude is that sys admins at this location are overpaid and should move to other clients. 3 managers in 3 years. I see the future of system administration as slowly recovering from the tech depression, but employers demand more expertise for less money.

It seems that the future of system administration is not a bright one. I expect the pay will be stagnant and sysadmins will continue to be asked to do more with less.

Morale

I hope there is still a system administration profession of non-trivial size in the United States in five years. I would like to believe that there will always be a market for high-quality work, but it looks to me like every large employer of sysadmins in the U.S. today thinks that they are completely interchangeable and that cheaper is always better. My "Plan B" is to become a math teacher, but that would necessitate a large pay cut with no less stress and no fewer hours.

As a very senior sysadmin I feel I've "topped out". Choice is to keep on in spite of boredom and frustration, enter "politics" i.e. management, do something radically more stressful, or retire. I haven't kept my coding skills up well enough to easily lateral to a programmer job even though I'm an "OK" (average) coder. ALSO: Age discrimination is a real worry.

I work for a large, publicly traded ISP, and love most aspects of my job, but our department was recently divided/reorganized. While some good things came from the reorganization, we also lost our new three-man department's mid-level administrator position in the process. As a result, our most senior administrator is far more busy than usual, leaving me without a mentor. In previous jobs I worked alone and it didn't seem to matter much, but in this one it is a crushing blow; I feel lonely and overwhelmed. I want to be able to do things the way I used to learn them--get in there and do it and by doing, learn--but it doesn't seem to work on this level and in this environment. I need the help, advice, and war stories of an experienced system

administrator, and they're simply not available. I dread going to work each morning and I dread feeling useless as I drive home each evening.

System Administration is turning into the white collar sweat shop of this and last decade.

We're all doomed.

Microsoft

Microsoft is going to kill our network. One system at a time.

Where do you want to go today?

it's out of control, and at our end of the market, dominated by a monopolist's agenda

The Profession

The challenge we see is the continuing trend for new hires to have no consideration for scaling a solution, exacerbated by a growing ignorance of security practices: Pretty matters too much. A fading leader failing to plan succession doesn't help.

I believe the decision not to allow SAGE to split from USENIX has damaged the profession.

The job nature of System Administration has been changed a lot in the coming 5 years. Now we have all necessary tools to do the job without understanding of how it works. And the SA jobs are divided into too many subjobs to different dept. This wll create turmoil

The "intermediate" sysadmin is disappearing. Junior sysadmins have easy ways to accomplish most functions, and Senior sysadmins are continuing to become specialists. The "intermediate" generalist is very hard to find, or to train, since it takes time and effort. Web has made it easy to do things without spending time learning, and I see many "so called intermediate" level people (in the market) with junior skills. Instead of risk management, IT is being asked to eliminate risk. I see a trend towards efficiency at the expense of flexibility. Sysadmins need to develop more management level skills to survive in this environment.

Though I no longer work for the organization I was at in 2005. The primary reason was that no one I worked with had any passion for systems administration. They were there to get paid and that was it. There was little motivation by anyone in my department to become something more, so I left for a place that has these values.

My biggest concern about the future of system administration is the growing trend for the sysadmin to be nothing more than a patch monkey that calls vendors whenever there is a problem. This seems to be more of an outcropping of SOX than anything else, since now the sysadmin is vilified because they have "root" access, so therefore must be punished and marginalized in order to "protect company assets".

Looking at the industry overall, I think right now companies are still viewing system admin and IT as a cost center. My new division seems to "get it" a little more in that regard, at least, but overall companies still seem to see IT as a money pit in some sense. IT in general has to get better at explaining why we are worth spending the money on.

Advice

Please work with LOPSA.

Attitude will make a difference Desire to learn new things I lasted longer then 80% of salaried employees in my particular group

In general, tasks are completed when all different professions/companies work together. Fighting between professions/organizations/companies only serves to make everyone's job more difficult.

I find that companies that give flexibility to it's admin's and trust in there ability and at the same time the admin performing to company satisfaction are key, also communication is very important. To be able to listen and talk. as managers listen to the admins expressing concerns they will know how to look at future products. admins listen and understand the needs of the company. Understand why certain solutions are needed and possibly accept it as no other solution may be present, but bring to the table solutions that can work with the environment but meet admin's needs. Managers should know what the admins expect in products and be able to present that to vendors looking for the solutions that will be best supported by the departments. Never alienate each other.

The Future

As more and more IT gets outsourced, I see in-house SA moving towards becoming business subject-matter experts who understand that particular organization and industry, and manage or facilitate for the third-party vendors. As a telco, my company's biggest problem is that they do not see the connection between the services that ride on the back-end systems and the customers' perception of our company. Most of my management chain is all about making sure that the pipes work, not making sure that the water is any good. As a result, my work is poorly funded, poorly supported, poorly understood, and poorly project-managed.

The future of system administration in this part of the world is bleak. Many multinational companies have won or are bidding on the work. The employer, one of two major employers in the area, is looking for a large contractor who will be able to scale well in order to not only take on my employers work but all public service IT in a given area (e.g., UNIX hosting, network, or Windows hosting).

Optimism

Systems Administration will survive, and the best will maintain their current standard of living for some time to come. The growth in this job field is on the low end of the pay spectrum, (ie Geek Squad, Front Line support, etc.). There will always be a need for someone who understands and maintains a company's computing infrastructure whether it lies in the next room or is outsourced.

Hopefully the future of System Administration continues to grow and be as or more challenging.

System Administration, though often under-valued, is still going strong; we will always need technical experts.

Also teach UNIX courses (System Administration, shell programming, C/C++ programming) - am seeing lots of enthusiasm for learning in the Continuing Education side of things and major disinterest in the Courses for Credit. Outsourcing and off-shoring will drive away potential new System Admins until the pendulum swings back this way. Have been in the business long enough to know it WILL swing back...and no one can predict WHEN...

Desires

More recognition of the field as a professional endeavor, especially at the management level. Otherwise, workplaces like mine will continue to force people out of the field. I am the only sysadmin I know who intends to be even remotely involved in the industry in 5 years. Would like to find more ways to integrate system administration education at the college level.

I would like to know as much sys admin as possible. I have only worked in the computer fiels for one year

Summary

A technically challenging profession that pays its entry people as much as US$50,000/year is an interesting one. System administration appears to be a fine way to make a living. Experience, education, and enhanced skillsets seem to be the growth path of choice (at least as far as increasing the midpoint of the salary bell curves goes).

About SAGE: A USENIX Special Interest Group

SAGE is a Special Interest Group of the USENIX Association. Its goal is to serve the system administration community by:

- Offering conferences and training to enhance the technical and managerial capabilities of members of the profession
- Promoting activities that advance the state of the art or the community
- Providing tools, information, and services to assist system administrators and their organizations
- Establishing standards of professional excellence and recognizing those who attain them

For a full list of SAGE benefits, check out http://www.sage.org/about/ .

Unemployment Survey

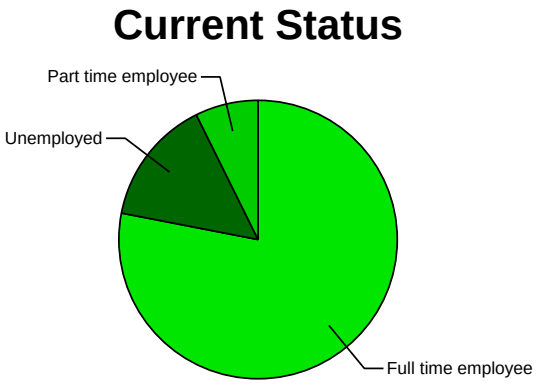
Introduction

Those respondents who were employed for less than 26 weeks were asked to answer a different set of questions that comprise the first ''SAGE Unemployment Survey.''

A total of 41 respondents submitted valid sets of responses. This is but 5.7% of total respondents. One might conclude that under 6% of admins are having serious unemployment problems, but odds seem more likely that other unemployed admins simply did not participate in the survey.

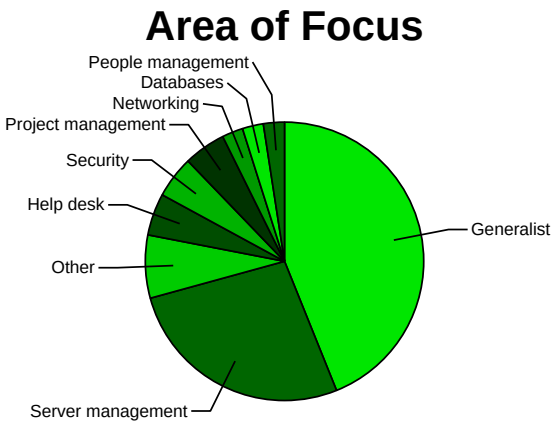
Did They Regain Employment?

As of the time they completed the survey, 72.3% of the group had regained full-time employment while an additional 19.8% had found part-time employment; only 17.8% remained unemployed (vs. 45.4% in 2003). The chart on the right shows the breakdown.



Focus

Respondents were asked about their primary admin focus; results are shown on the right. Slightly more generalists and server managers seem to be unemployed than the employed population as a whole.



Geography

A slight dip (vs. the employed admin survey) in USA respondents at 63%:

Unemployed Sysadmin Geography

Country	% Resp.	Country	% Resp.	Country	% Resp.
United States	63.4%	Finland	2.4%	South Africa	2.4%
Canada	7.3%	Malta	2.4%	Sweden	2.4%
Australia	4.9%	Mexico	2.4%	United Arab Emirates	2.4%
Argentina	2.4%	Portugal	2.4%		
Belgium	2.4%	Serbia	2.4%		

The traditional concentration of technical jobs in a given area seems to map well onto the locations of those unemployed, except the Bay Area, which seems a bit low. Note that these are percentages of respondents, not percentages of unemployment in those cites.

Metropolitan Locations

Where	% Resp.	Where	% Resp.
N/A	37.0%	San Francisco/San Jose/Silicon Valley, CA, Area	7.4%
Los Angeles/Orange Co., CA, Metro Area	14.8%	Atlanta, GA Metro Area	3.7%
Washington, DC, Metro Area	11.1%	Denver, CO Metro Area	3.7%
Boston, MA, Metro Area	7.4%	Chicago, IL Metro Area	3.7%
New York Metro Area	7.4%	Ottawa, ON, Metro Area	3.7%

Education

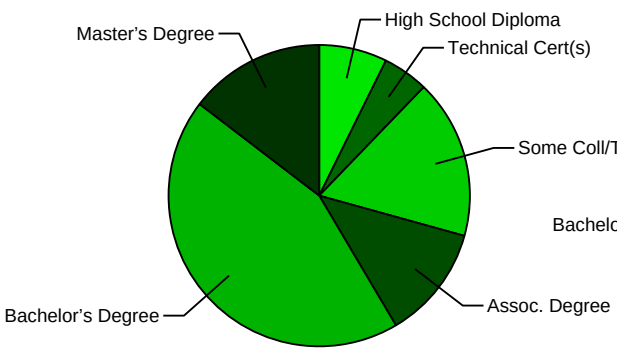
These respondents' learning techniques are almost indistinguishable from the employed group. The main difference is that they have had less training at conferences. Of course, this might also mean that they have less ''peer networking'' and contacts to find a new job.

How Admins Learn

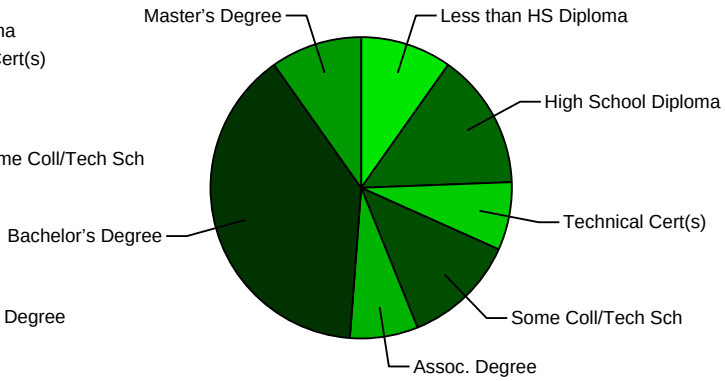
Learning Methods	Not at all	A bit	Somewhat	A lot
On the job	2.4%	2.4%	24.4%	70.7%
Taught myself (textbooks, web, practice, etc.)	4.9%	7.3%	24.4%	63.4%
University/college education (CS/IS/IT degree program)	31.7%	17.1%	24.4%	26.8%
Mentor of any kind	24.4%	17.1%	39.0%	19.5%
Vendor-specific training courses	51.2%	17.1%	24.4%	7.3%
Certification program courses	68.3%	19.5%	7.3%	4.9%
Non-degree tech school, college, or university courses	70.7%	17.1%	7.3%	4.9%
Military	90.2%	2.4%	2.4%	4.9%
Other	92.7%	0.0%	4.9%	2.4%
Conferences/commercial training	53.7%	19.5%	26.8%	0.0%

The unemployed respondents have almost identical educational backgrounds to those who are employed.

Highest Education

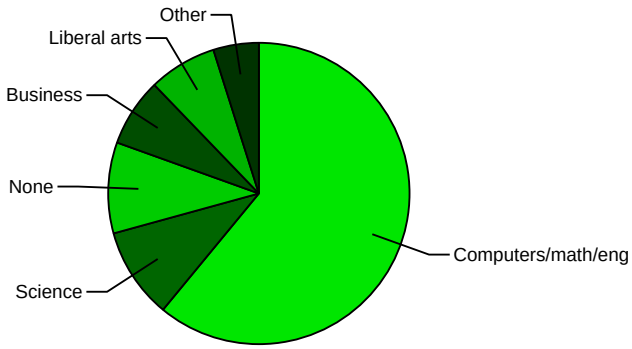


Highest Relevant Education



Unemployed respondents had strong relevant post-high-school training with almost three-quarters citing computers and related subjects.

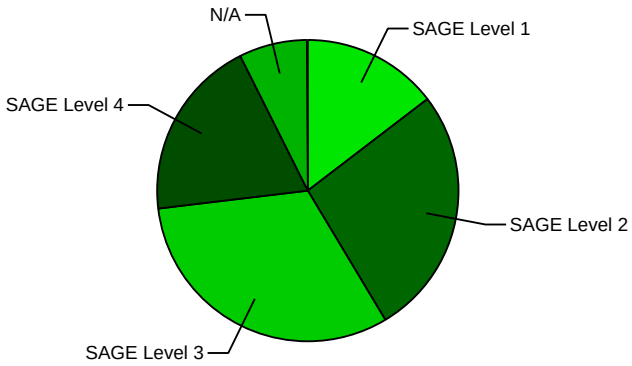
Post-High-School Subjects



SAGE Level

Those unemployed were spread out among all the SAGE Levels this year.

SAGE Level



Industries

IT companies and education lead the way for industries of the unemployed (though the sample was very small this year).

Industries of the Unemployed

Type	% Resp.	Type	% Resp.
IT Company: Other	9.8%	Utility	2.4%
Education - College or University	9.8%	Aeronautical/aerospace	2.4%
Telecommunications	7.3%	Hospitality	2.4%
Not-for-profit	7.3%	Insurance/risk management	2.4%
Other, please specify briefly	4.9%	IT Company: ISP/ASP	2.4%
IT Company: Consulting	4.9%	Computer hardware/semiconductor	2.4%
IT Company: Web development/webmaster	4.9%	Consulting and Business Services	2.4%
Education - Elementary or Secondary	4.9%	IT Company: Software Development	2.4%
Entertainment	4.9%	Education - Commercial, training, etc.	2.4%
Financial services (all kinds)	4.9%	Manufacturing	2.4%
Government - Contracting	4.9%	Religion	2.4%
Travel/Recreation	2.4%	Retail	2.4%

Technical Associations

Unemployed respondents joined technical associations at a slightly lower rate than their counterparts and generally felt they were less helpful (same as in 2003).

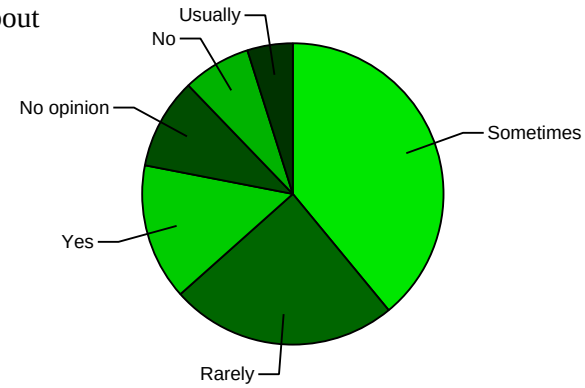
Technical Assns/Rated Utility

Organization	Do not belong	Belong	Belong & helpful	Belong & very helpful
USENIX	78.0%	4.9%	9.8%	7.3%
SAGE	73.2%	2.4%	22.0%	2.4%
A local computer/ OS/user group	85.4%	12.2%	0.0%	2.4%
ACM	87.8%	4.9%	7.3%	0.0%
IEEE	90.2%	7.3%	2.4%	0.0%
SANS	97.6%	0.0%	2.4%	0.0%

Certifications

These respondents generally held the same opinions about certifications as those who filled in the other part of the survey.

Value of Certifications



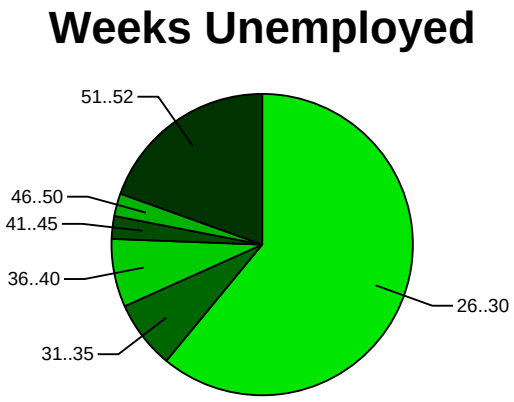
Generally, certification levels were similar, though COMPTIA showed up much higher in this list of certifications of the unemployed (only certificates held by 1% or more are shown).

Certifications Held

Certification	% Resp.	Certification	% Resp.	Certification	% Resp.
Bachelor's Degree (any relevant)	17.1	Compaq	2.4	LPI (any)	2.4
Microsoft MCP/MCP+i	9.8	COMPTIA Security+	2.4	IBM (any)	2.4
COMPTIA Linux+	7.3	Novell CNE	2.4	Red Hat (any)	2.4
Cisco CCNA	4.9	Microsoft MCS*	2.4	SAIR certified Linux administrator	2.4
COMPTIA N+	4.9	SANS/GIAC GCIH	2.4	CISA (ISACA)	2.4
(ICS)2 CISSP	4.9	Sun/Solaris SCN*	2.4	Sun/Solaris SCSA	2.4
HP (any)	2.4	COMPTIA I-Net+	2.4	AIX (any)	2.4
SANS/GIAC GCIA	2.4	Cisco CCNP	2.4	COMPTIA A+	2.4

Unemployment Duration

The median unemployment period was 26 weeks − six months. The mean was 31.9 weeks, with a standard deviation of 9.3 weeks. Only a few respondents were out for an entire year.



Unemployment Hardships

Respondents were asked what hardships they might endure in order to get a job. Most, of course, are now employed. 'On call' work was onerous only to 24%; extended commute bothered 39%. 43.9% would not relocate; 39% would not take a part-time job. A 10% paycut was acceptable only to a third; a 25% pay cut only to a tenth (way down from last year). Only 4.9% could stand a 50% pay cut. Of course, most already know what they achieved, so these numbers might indicate a bit more intolerance than reality.

What Admins Will Do to Gain Employment

Actions	No	Yes
Are you employed now?	22.0%	78.0%
Are/were you willing to take a job requiring that you be on-call outside work hours?	24.4%	75.6%
Are/were you willing to extend your commute to get a job?	39.0%	61.0%
Are/were you willing to take a part-time job?	39.0%	61.0%
Are/were you willing to relocate to get a job?	43.9%	56.1%
Are/were you willing to take a 10% paycut (relative to area) to get a job?	65.9%	34.1%
Are you more of a people manager than an individual contributor?	87.8%	12.2%
Are/were you willing to take a 25% paycut (relative to area) to get a job?	90.2%	9.8%
Are/were you willing to take more than a 50% paycut (relative to area) to get a job?	95.1%	4.9%
Are/were you willing to take a 50% paycut (relative to area) to get a job?	97.6%	2.4%

Job Requirements

Respondents chose properties that were essential in their new job. Salary was #1, followed by a good working environment and good benefits. Technology, projects, and challenge all beat out good management.

Job Requirements

Count	Requirement	Count	Requirement	Count	Requirement
4	Salary: good	1	Good corporate culture	1	More time to test new systems
4	Good challenge	1	Good health insurance	1	Not fighting fires all the time
3	Good environment	1	Good location	1	Opensource software
2	Commute: very short	1	Good monitoring system	1	Opportunity for training
2	Flexible working hours	1	Good peers	1	People that are united in vision and purpose
2	Salary: higher	1	Good perks	1	Recognition of achievements/accomplishments
2	Telecommute availability	1	Good project latitude	1	Relaxed atmosphere
1	Clarity in instruction	1	Good technical infrastructure in place	1	Respect for my experience
1	Commute: less than 25 miles	1	Good work environment	1	Responsibility with accountability
1	Competent mangement	1	Laissez faire management	1	Team environment
1	Excellent Internet connectivity	1	Larger Team to provide 24/7 Support	1	Technology management
1	Fairness on work disciplines	1	Learning experiences	1	Warm climate
1	Friendly users	1	Low stress	1	Warm friendly caring people
1	Good coffee	1	Management: Open-mindedness	1	Work satisfaction
1	Good compensation	1	More opportunities		

Job Anti-Requirements

Respondents were asked what properties had to be avoided in their new job. No answer appeared more than once.

- 24/7/365 on-call for any one person
- Back stabbing
- Closed proprietary OS environments
- Cold climates
- Companies who intrude on my civil liberties
- Consulting
- Discriminatory treatment
- Formal dress-code
- Help desk work
- High stress
- Hostile co-workers
- Management with no individual contribution
- Mean self serving backstabbing alcoholic people bent on ruin and perversion
- No benefits
- Not answering phone calls outside work hours
- Poor payment
- Racial slurs
- Regular weekend/evening work
- Stressful geography
- Unfair non-compete clauses
- Working outside work hours without overtime
- No bug tracking/ticketing system for managing incoming work

Job Hunting Techniques

How did respondents go about finding a new job? The chart on the right shows some of the schemes. Other methods used include: friends, personal contacts SAGE Jobs Board, networking at a conference, and ‘‘usually my employers come to me.’’

Job Finding Methodology

Means	% Resp.
Web	85.4
Personal networking	68.3
Newspaper	39.0
Recruiters	36.6
TV	4.9
Radio	4.9

Respondents spend a mean of 7.9 (vs. 2003: 19.2) hours/week job-hunting, with a median of 5 hours/week. It is almost as if it wasn’t so hard this year to find a position.

Weekly Hours Job-Hunting